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Publisher: Routledge

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Asian Journal of Communication

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rajc20>

The spiral of silence and journalists' outspokenness on Twitter

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Published online: 26 Feb 2014.

To cite this article: Na Yeon Lee & Yonghwan Kim (2014) The spiral of silence and journalists' outspokenness on Twitter, *Asian Journal of Communication*, 24:3, 262-278, DOI: [10.1080/01292986.2014.885536](https://doi.org/10.1080/01292986.2014.885536)

To link to this article: <http://dx.doi.org/10.1080/01292986.2014.885536>

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ORIGINAL ARTICLE

The spiral of silence and journalists' outspokenness on Twitter

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(Received 3 March 2013; accepted 16 January 2014)

This study examined whether Twitter can serve as a public sphere where opinion leaders – in this case, journalists – speak up about politically controversial issues. Based on the theoretical framework of the spiral of silence (SOS), 118 Korean journalists from nine national newspapers and two network broadcasting companies were surveyed about their behavior on Twitter with regard to two controversial issues in South Korea. Results showed that journalists who perceived a greater discrepancy between their opinions and the opinions of Twitter users about controversial issues in South Korea were less willing to voice their opinions on Twitter; moreover, the journalists' ideology was found to be a significant factor in expressing their opinions about controversial issues on Twitter. Specifically, politically conservative journalists were more likely to perceive that their opinions were in the minority; therefore, they were less likely than politically liberal journalists to discuss their opinions on Twitter because use of that particular technology is generally regarded in Korea as favored by liberals. This study contributes to the SOS theory by applying public opinion theory to opinion leaders, particularly journalists, and by suggesting that ideology can be a key factor in individuals' ability to perceive discrepancy with opinions of others. This study also contributes to the SOS literature by expanding the majority influence from offline to online environments, especially on Twitter.

Keywords: Twitter; journalists; spiral of silence; political ideology

With the introduction of the Internet and new media, scholars have investigated whether the new media environment can be a place where people feel free to share their opinions about public issues and, therefore, whether public opinion represented in an online forum can be regarded as quality public opinion (Ho & McLeod, 2008; Papacharissi, 2009; Price & Cappella, 2002). Especially Twitter, the micro-blogging platform that allows people to share 140-character posts (Takhteyev, Gruzd, & Wellman, 2011), is regarded as having the potential to play a role as an online forum because thousands of Twitter users are able both to obtain news and to voluntarily post their opinions about certain issues (Pew Internet & American Life Project, 2011). The rapid increase of adoption and extensive use of Twitter suggest this particular technology might, in some cases, be regarded as a proxy of public opinion. However, if opinions on Twitter are not fully representative of public opinion, for example, the opinions are either over-representative or under-representative of certain groups, then Twitter's role in the public sphere may be limited.

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Previous studies have repeatedly reported that people are found to be less likely to express their real opinions under certain circumstances when they perceive their opinions differ from those of the majority, not only in face-to-face discussions but also in online circumstances (Noelle-Neumann, 1974; Scheufele, 2008; Scheufele & Moy, 2000; Yun & Park, 2011). The theory of spiral of silence (SOS; Noelle-Neumann, 1974) posits that people are able to perceive the majority opinion and, based on that perception, tend not to speak out if they hold a minority opinion. In other words, people are discouraged from speaking up and they keep silent, so that their perspective diminishes within their society, especially in collectivist cultures (Huang, 2005; Noelle-Neumann, 1974; Shen, Wang, Guo, & Guo, 2009). In addition, several studies on the function of new media as a public sphere propose the idea that the new media have some limits as online forums, specifically, based on findings that online forums are more likely to be used within a closed environment where people tend to follow or conform to the majority perspective of other online users (Chang & Park, 2012; Lee, 2004, 2006; Yun & Park, 2011). It is important to investigate whether Twitter plays a role as one form of online forums by examining users' feelings about expressing their opinions on Twitter – for the reason that without free expression, it is not possible for Twitter to serve as a public sphere and, as a result, views that are posted on Twitter may not be truly representative.

The purpose of this study is to examine whether and the extent to which journalists, who are regarded as opinion leaders, speak up about controversial issues on Twitter, based on the theoretical framework of the SOS (Noelle-Neumann, 1974). Especially, this study focuses on how journalists' opinion gap with Twitter users and/or fear of isolation influence their outspokenness on Twitter. In the social media context, journalists may easily perceive majority opinion in social media due to direct and immediate responses from online audiences so that they may not be willing to speak when their opinion is in the minority. This question is crucial because, in many offline situations, journalists have been regarded as significant and direct players in the formation of public opinion (Converse, 1964/2006; Hoffman, 1980; Patterson, 2005; Scheufele & Moy, 2000; Zaller, 1992), so that within the Twitter sphere the silence by one group of opinion leaders may have a critical impact on the formation of public opinion among Twitter users. To date, however, little research has examined (1) whether journalists remain silent when they feel that their opinions differ from those of the perceived majority and (2) whether this occurs in social media contexts (i.e., Twitter). Therefore, this study contributes to the SOS theory by applying public opinion theory to opinion leaders, particularly journalists, and by expanding the social context influence of majority pressure from offline print and broadcast media to online social media, especially Twitter.

Background

In tandem with those questions, this study investigated journalists' silence on Twitter, within the context of South Korea. The unique media market structure of South Korea provides an optimal opportunity to examine whether the theory of the SOS is applied to Twitter because the South Korean public has the common perception that opinions expressed on Twitter are liberal leaning with regard to political issues (Kang, 2013; Lee & Ban, 2011). Historically in South Korea, the politically conservative media (newspapers and broadcasters) have had the largest market (KABC, 2012; Kim & Hamilton, 2006), while many online or alternative media, based on new technologies, are

regarded as politically liberal (Kim & Kim, 2012; Song, 2007). Therefore, many people perceive that news opinions expressed on the Internet are liberal friendly or dominant (Kim & Kim, 2012; Lee & Ban, 2011).

This study focused on South Korea because there are sharp contrasts between types of media, on the one hand, and political ideologies, on the other hand. The oppositional positions of types of media and political ideologies raise questions about whether users' ideologies may play a key role in their perceptions of the opinions of others, in particular Twitter users, and, consequently, how those perceptions may affect conservatives' behavior on Twitter. This study deals with two controversial issues – the performance of South Korea's President and the US–Korea Free Trade Agreement (FTA) – toward which liberal and conservative Koreans took opposite positions (e.g., liberals negatively evaluated former President Lee and resisted adoption of the FTA).

Literature review

SOS theory (Noelle-Neumann, 1974) offers a useful theoretical framework to explain the reasons why people are sometimes willing to express their opinions whereas at other times they are unwilling to do so. The SOS theory posits that people express their opinions based on their perceptions of majority opinions. People are willing to speak up when they perceive their opinions are prevailing but are less likely to express their opinions when they perceive their opinions are in the minority (Noelle-Neumann, 1974). This study extends that line of inquiry by examining whether the phenomenon of SOS exists among journalists who use Twitter on the two main premises suggested by the SOS theory (McDevitt, Kioussis, & Wahl-Jorgensen, 2003; Scheufele, 2008; Scheufele & Moy, 2000). First, the journalists (like the public) voluntarily and actively sense the majority opinion (or climate of opinion) because they have a 'quasi-statistical sense' to gauge opinion trends mainly through media coverage (Noelle-Neumann, 1974; Scheufele, 2008). Second, journalists' motivations for surveying the climate of opinion are derived from their 'fear of isolation.' Based on the unique media market in South Korea, this study examined also whether and to what extent political ideology may influence journalists' willingness to speak up on Twitter.

Perceived gap with majority opinion on Twitter

The perceived climate of opinion is found to be a significant variable that affects people's outspokenness. In a meta-analysis of studies on the SOS, Glynn, Hayes, and Shanahan (1997) concluded that, among many variables, perceived opinion congruency (i.e., people's estimation of whether their own opinions are congruent with the majority opinion) has a significant effect on outspokenness. Other theorists, skeptical of the influence of the anonymous public perspective on an individual's expression of opinions, have suggested that other factors are related to perceived majority opinion (Hayes, Glynn, & Shanahan, 2005a, 2005b; Huang, 2005; Lasorsa, 1991; Neuwirth & Frederick, 2004; Neuwirth, Frederick, & Mayo, 2007; Shen et al., 2009). Other factors include, for example, a peer or reference group's opinion (Moy, Domke, & Stamm, 2001; Neuwirth & Frederick, 2004; Neuwirth et al., 2007; Oshagan, 1996), self-censorship (Hayes et al., 2005a, 2005b), and personal interest in political issues (Kim, Han, Shanahan, & Berdayes, 2004).

With the advent of the new media, scholars have been interested in examining whether the SOS theory will work in the new media environment, particularly in online forums, online commenting, and blogs (Ho & McLeod, 2008; Shen et al., 2009; Yun & Park, 2011). The introduction of various online forums also raises questions about what actually constitutes the majority opinion because individuals can easily encounter a conflict between the majority opinion in online forums and public opinion in general (Yun & Park, 2011). Therefore, when conflicts arise, the question is which opinion (online or the general public) is more influential with regard to the issue of outspokenness online. Several recent studies that have applied the SOS theory to online discussions (Chang & Park, 2012; Price, Nir, & Cappella, 2006; Yun & Park, 2011) have found rather consistent results, indicating that people are less likely to post messages online when they perceive their opinion is in the minority online, regardless of their perception of the general public opinion (Chang & Park, 2012; Yun & Park, 2011).

To our knowledge, no study on journalists' outspokenness on Twitter has been conducted, which led to our examination of this inquiry. It may be argued that journalists, in their roles as professionals, may differ from the general public that the theory of SOS initially addressed. However, we assume that the SOS theory is applicable also to journalists because journalists are immediately able to perceive the responses of their audience in the social media context and, as a result, may be more influenced by the opinions of their online audience. In fact, Kim's (2011) study found that journalists' perceived risks about interaction with online audiences constituted a significant and negative factor for journalists in their use of blogs, indicating that journalists are concerned about or at least consider Internet users' opinions and thoughts when they are involved in online media activities, including outspokenness about political issues. Therefore, we reason that journalists' willingness to speak up may be influenced by perceptions of majority opinions. Therefore, the first hypothesis predicts:

H1: Journalists' outspokenness on Twitter about controversial issues will be determined by the perceived majority opinion of other Twitter users, not the perceived majority opinion of the general public.

Fear of isolation

Fear of isolation is a primary concept underlying the psychological mechanism that explains the process of the SOS (Noelle-Neumann, 1974; Scheufele, 2008). Fear of isolation has been used as a main explanation for why a perceived gap with the majority opinion leads to unwillingness to speak out: that is, people who fear being isolated will follow the majority opinion (Moy et al., 2001; Noelle-Neumann, 1974; Scheufele & Moy, 2000). However, previous studies (based on SOS theory) have presented results that contradict the validity of fear of isolation as a predictor variable (McDevitt et al., 2003; Neuwirth & Frederick, 2004; Neuwirth et al., 2007; Scheufele, 2008). In several studies that tested the SOS theory, fear of isolation was found to have a moderate or negligible effect on one's willingness to speak up (Glynn et al., 1997; Kim et al., 2004; Scheufele & Moy, 2000) whereas in other studies, it was found to have a strong effect on an individual's outspokenness (Ho & McLeod, 2008; Moy et al., 2001). Inconclusive results provided by previous research may indicate that other mechanisms may exist that cause people to be silent. For example, the role of fear of isolation in SOS may work differently

depending on the communication or media environment used – e.g., whether discussions are carried out online or offline.

An online discussion environment may further attenuate the role of ‘fear of isolation’ as a predictor in people’s expression of their opinions because anonymity and the lack of physical presence made possible by an online environment are considered to reduce the pressure of social conformity. For instance, Ho and McLeod (2008) documented that the influence of fear of isolation on willingness to speak out becomes significantly reduced in computer-mediated communication (CMC) contexts (e.g., online chat rooms) compared to face-to-face conditions (FTF). The unique characteristics of journalists in their professional roles compound the challenges in predicting how fear of isolation will influence their willingness to speak up because journalists can be regarded as ‘hard core,’ that is, people who keep repeating their opinions regardless of the perceived discrepancy (Noelle-Neumann, 1974). Based on these conflicting results provided by previous studies, the first research question (RQ1) was asked:

RQ1: How will fear of isolation be associated with journalists’ outspokenness on Twitter?

Mediating role of the perceived gap in the relationship between ideology and outspokenness

Fear of isolation, widely employed as a mechanism to explain the relationship between the gap in opinion and willingness to speak up, has been questioned by several scholars who argued that an explication of fear is needed (Salmon & Kline, 1985; Salmon & Neuwirth, 1990; Scheufele, 2008; Scheufele & Moy, 2000). For instance, Salmon and Neuwirth (1990), argued the ‘fear of appearing ignorant’ rather than ‘fear of isolation’ influences individuals’ willingness to speak up so that different types of possible fears or factors should be considered.

In the same line of logic, social identity was found to be an important factor to motivate people to express their minority opinions (Jeffres, Neuendorf, & Atkin, 1999) as observed by Sharmir (1997) who noted that some are positively influenced by their deeply cherished values to speak out. However, with the exception of fear of isolation, little is known about the underlying mechanisms that influence how individuals feel about opinion gaps with others that may affect their outspokenness. In line with previous studies, it is plausible to expect individuals’ political predisposition may influence their perceived discrepancy with others’ opinions that, in turn, may affect their outspokenness.

This study addresses the idea that journalists’ political ideologies might play an important role in influencing their outspokenness on Twitter when they perceive a gap between their own opinions about political issues and the majority opinion on Twitter. This may be a particularly revealing issue with regard to journalists’ use of Twitter, particularly in the context in South Korea, where people have a perception that online media and Twitter are a liberal-friendly or liberal-dominant space (Hsu & Park, 2012; Kang, 2013; Kim & Kim, 2012; Lee & Ban, 2011; Song, 2007). For instance, one news article pointed out that the ratio of politically liberal users to conservative users in South Korea is about 7:3, despite the fact that the ratio of conservative voters rapidly increased during presidential election in 2012 (Kang, 2013). Especially in the political arena, liberal politicians initially led in adoption of Twitter (Baik, 2009), and Hsu and Park (2012) found that the politicians in liberal parties were more likely to make better use of Twitter.

Precisely because Twitter space in Korea is considered to be liberal-leaning, conservative journalists may perceive a greater opinion gap between their own opinions on controversial issues. Consequently, the more conservative the journalists are, the less willing they may be to speak out their thoughts and opinions on Twitter due to their perception of opinion gaps with other users. Therefore, we tested whether journalists, the same as the public, perceive the majority opinion on Twitter to be more liberal than that of the general public opinion, specifically with reference to the two controversial issues in South Korea considered in this study. Thus, the following hypothesis (H2) was proposed, given that the liberals were dominant, at least in people's perceptions, in the early stage of Twitter adoption in South Korea when this study was conducted:

H2: Journalists, regardless of their political ideology, will perceive that Twitter users are less supportive of the two pro-conservative issues than the general public.

Based on the logic that journalists generally perceive the majority opinion on Twitter to be liberal leaning, then conservative journalists, due to their ideology, were considered more likely to perceive an opinion gap with the majority on Twitter than liberal journalists who would likely expect to share a political ideology with majority opinions of Twitter users. The differences of perception would logically, therefore, be expected to have an effect on journalists' outspokenness on Twitter. Therefore, the third hypothesis (H3) proposed the mediating role of journalists' perceptions of an opinion gap with Twitter users in the relationship between ideology and their outspokenness about controversial issues:

H3: Conservative journalists will perceive a greater gap between their own opinion and the majority opinion on Twitter, which, in turn, will influence their engagement in discussion about controversial issues on Twitter.

Method

Data collection and analysis

A web-based survey of journalists in South Korea was conducted. Based on a list of names and email addresses provided by the Korea Press Foundation, the survey targeted 1888 journalists at nine national newspapers (1229) and two major broadcasting news networks (659). After invalid email addresses were excluded, there were about 1700 journalists within the sampling frame. The three major newspapers, which are regarded as conservative (*ChosunIlbo*, *JoongAngIlbo*, and *DongAIlbo*), have a combined circulation of more than 4 million (4,360,000) while the two remaining newspapers (*Hankyoreh* and *Kyunghyang*) are considered liberal with a combined circulation of only 400,000 (KABC, 2012). The market share of the three remaining newspapers, which are viewed as neutral, is relatively small. Among the three network broadcasting companies – Korea Broadcasting System (KBS), Munhwa Broadcasting Corporation (MBC), and Seoul Broadcasting System (SBS) – MBC is regarded as politically liberal but is not free from government influence because of its corporate governance and SBS is regarded as more commercial. Between 30 March 2012 and 19 April 2012, a total of 118 journalists completed the questionnaire with a response rate of 6.94% ($N = 118$, the number of original and valid sampling frame was 1700), which may be acceptable considering the

difficulty of conducting research among journalists as well as the purpose of this study, which focused on theory testing rather than describing a phenomenon.

Prior to this study, three journalists were interviewed to obtain information about journalists' Twitter use and a pretest was conducted among seven journalists to revise the questionnaire. Data from the pre-test were not included in the final analysis.

Measurement

Noelle-Neumann's (1974) SOS theory suggests that two variables – the perception of public opinion (perceived climate of opinion) and fear of isolation – are important predictors for determining one's expression of opinion. In addition, this study assumed that journalists' ideologies also play an important role in the process of the SOS in terms of influencing their perceptions of a gap with the majority opinion when they discuss politically controversial issues on Twitter. Therefore, this study employed three factors as main predictor variables: namely, the gap with the majority opinion (in general vs. on Twitter), fear of isolation (in general vs. on Twitter), and the journalists' own political ideology. As mentioned previously, the two discussion topics selected for this study were controversial or related to morality, in keeping with guidelines of the SOS theory and prior research (Noelle-Neumann, 1974; Scheufele, 2008; Scheufele & Moy, 2000).

Discrepancy with perceived majority opinion

Based on previous studies (Ho & McLeod, 2008; Moy et al., 2001; Salmon & Neuwirth, 1990), the two independent variables, discrepancy with majority opinion in general and discrepancy with majority opinions on Twitter, were measured by comparing a journalist's evaluation with his or her perceptions of majority opinions in general and on Twitter, for the two issues.

First, journalists were asked their opinions on the two issues with a five-point scale (ranging from 1 = 'not at all' to 5 = 'very much'): 'To what extent do you evaluate the President's performance positively?' ($M = 2.19$, $SD = 1.01$) and 'To what extent do you support the US–Korea FTA?' ($M = 3.23$, $SD = 1.18$). For the perception of the majority opinion in general, 'To what extent do you think the majority in our society evaluates the President's performance positively?' ($M = 2.01$, $SD = 0.75$) and 'To what extent do you think the majority in our society supports the US–Korea FTA?' ($M = 3.01$, $SD = .85$). For the measurement of the perceived majority opinion on Twitter, 'To what extent do you think the majority of people online (or on Twitter) evaluate the President's performance positively?' ($M = 1.47$, $SD = .62$) and 'To what extent do you think the majority of people online (or on Twitter) support the US–Korea FTA?' ($M = 2.03$, $SD = .63$). Journalists' perceived discrepancy with majority opinions for the two controversial issues was as follows: (1) the gap between journalists' opinions and their perception of Twitter users' opinions about the President's performance ($M = .92$, $SD = .87$) and US–Korea FTA ($M = 1.48$, $SD = 1.00$), and (2) the gap between journalists' opinions and their perceptions of public opinion, in general, about the President's performance ($M = .53$, $SD = .61$) and US–Korea FTA ($M = .70$, $SD = .75$). This study did not consider the direction of congruency (e.g., favor or oppose) in keeping with prior studies (Ho & McLeod, 2008; Moy et al., 2001; Salmon & Neuwirth, 1990). Noelle-Neumann (1974) argued that if the participants were in the minority, they would not speak out their opinions, regardless of the directions.¹

Fear of isolation

Based on previous studies (Ho & McLeod, 2008; Moy et al., 2001; Yun & Park, 2011), two types of fear of isolation were measured: fear of isolation in general and fear of isolation on Twitter. For fear of isolation in general, the following three questions were asked with a five-point scale (ranging from 1 = 'not at all' to 5 = 'almost true'): 'In general, I worry about being isolated if people disagree with me,' 'In general, I avoid telling other people what I think when there's a risk they'll avoid me if they know my opinion,' and 'In general, I try to avoid getting into arguments' ($M = 7.61$, $SD = 2.05$, Cronbach's alpha = .69). For fear of isolation on Twitter, the following three questions were asked with a five-point scale (ranging from 1 = 'not at all' to 5 = 'almost true'): 'On Twitter, I worry about being isolated if people disagree with me,' 'On Twitter, I avoid telling other people what I think when there's a risk they'll avoid me if they know my opinion,' and 'On Twitter, I try to avoid getting into arguments' ($M = 7.87$, $SD = 2.30$, Cronbach's alpha = .70).

Ideology of the journalists

The ideology of the journalists was measured by asking whether they thought of themselves as liberal or conservative (ranging from 1 = "extremely liberal" to 7 = "extremely conservative," $M = 3.91$, $SD = 1.27$).

Outspokenness

Previous studies have criticized the SOS theory for relying on a single measure of 'willingness to express opinion' and 'hypothetical situations' (Glynn et al., 1997; McDevitt et al., 2003; Scheufele, 2008). This study addressed those criticisms by measuring participants' actual outspokenness on Twitter. With regard to actual discussion experience or outspokenness, this study asked about three types of discussions for each issue. For the issue of the President's evaluation, respondents were asked how frequently they discussed this issue with Twitter users, expressed *positive* opinions on Twitter, and expressed *negative* opinions on Twitter with a five-point scale (ranging from 1 = 'not at all' to 5 = 'very much,' $M = 1.50$, $SD = 2.39$, Cronbach's alpha = .77). The higher values indicate greater discussion behavior. The respondents were asked the same three types of questions regarding the US-Korea FTA ($M = 1.08$, $SD = 1.99$, Cronbach's alpha = .84).

Twitter use

Individuals' general Twitter use may influence the dependent variables of interest – discussion about the President's performance and the FTA issue on Twitter. Therefore, general Twitter use was measured by asking how many tweets participants read in a typical day (range = 0–8 [more than 51 tweets], $M = 2.90$, $SD = 2.83$), and that number was included in the regression analyses as a control variable. The number of tweets participants read on Twitter can be considered an indirect measure of general Twitter use.

Results

Perceived discrepancy with Twitter users matters

The first hypothesis (H1) predicted that the perception of discrepancy with the majority opinion on Twitter would affect journalists' outspokenness on Twitter while the perceived discrepancy with the majority opinion in the general public would not. As expected, for the issue of evaluating the President's performance, the gap between the journalists' opinions and their perceptions of the majority opinion among other Twitter users was a significant and negative factor in predicting the journalists' discussion behaviors on Twitter (see Table 1). Specifically, those who perceived a greater gap between their own evaluation of the President's performance and Twitter users' evaluations were less likely to discuss that issue on Twitter ($\beta = -.287, p < .01$). In other words, the larger the discrepancy between the journalists' own opinions about controversial issues and the journalists' perceptions of opinions of others on Twitter, the less likely the journalists were to speak up.

For the FTA issue, as shown in Table 2, the opinion gap with Twitter users was significantly associated with participants' discussion behavior on Twitter ($\beta = -.195, p < .07$). In addition, as expected, the gap between journalists' opinions and the general public opinion was not a significant predictor for the two issues (the president's performance: $\beta = .061, p = \text{n.s.}$; FTA issue: $\beta = .023, p = \text{n.s.}$). Therefore, overall, H1 was supported.

Notably, for both issues, journalists' ideology, which was applied in this current study as an independent variable, was found to be a significant and negative factor in predicting journalists' outspokenness on Twitter: the conservative journalists were less likely to discuss the two controversial issues on Twitter. Specifically, for evaluation of the President's performance, conservative journalists were less likely than liberal journalists to speak out their opinions on Twitter ($\beta = -.303, p < .01$). For the FTA issue, political ideology was found to be a significant and negative factor in predicting journalists' discussion behaviors ($\beta = -.208, p < .01$). It means that journalists who are liberals are more likely than journalists who are conservatives to speak out on Twitter. Fear of

Table 1. Regression predicting journalists' outspokenness about the *President's performance* on Twitter.

	β (SE)
<i>Twitter use and ideology</i>	
Twitter use	.151 (.073) [†]
Political ideology	-.303 (.181)**
R^2 (%)	.235
<i>Fear of isolation</i>	
In general	.026 (.119)
On Twitter	-.025 (.108)
R^2 (%)	.236
<i>Discrepancy</i>	
General public	.061 (.372)
Twitter users	-.287 (.288)**
Total R^2 (%)	.291
N	114

Note: [†] $p < .10$, ** $p < .01$, Political ideology = extremely liberal (1) to extremely conservative (7).

Table 2. Regression predicting journalists' outspokenness about the US–Korea FTA on Twitter.

	β (SE)
<i>Twitter use and ideology</i>	
Twitter use	.031 (.068)
Political ideology	-.208 (.165)**
R^2 (%)	.096
<i>Fear of isolation</i>	
In general	-.107 (.112)
On Twitter	.102 (.101)
R^2 (%)	.100
<i>Discrepancy</i>	
General public	.023 (.254)
Twitter users	-.195 (.210)*
Total R^2 (%)	.129
N	114

Note: * $p < .07$, ** $p < .05$, political ideology = extremely liberal (1) to extremely conservative (7).

isolation, however, was not a significant predictor of journalists' discussion behaviors for both issues on Twitter (RQ1).

Journalists' different perceptions of general public vs. Twitter users

The second hypothesis (H2) predicted that journalists, regardless of their own political ideology, may perceive the majority opinions toward controversial issues on Twitter as being more liberal leaning than the majority opinions among the general public. To test H2, the perceived majority opinion on Twitter was subtracted from the perceived majority in general for both issues: the President's evaluation and the FTA. For both issues, one-sample t test showed that the subtraction score was statistically different from zero for both issues (president's evaluation: $t(117) = 10.726, p < .01$; US–Korea FTA: $t(117) = 8.147, p < .01$), meaning that the journalists had a perception that the majority opinion in general was more supportive or positive than the majority on Twitter. Further analysis of variance (ANOVA) showed that regarding the journalists' perceptions of the majority opinion on Twitter about the two controversial issues, there was not a significant difference among liberals, neutrals, and conservatives, $f(2, 116) = .731, p > .05$.² In summary, for both issues, Korean journalists were more likely to perceive the majority opinion on Twitter as being less supportive or less positive than the majority opinion in general; thus, H2 was supported.

Mediating mechanisms of outspokenness

Based on the results of H2 that journalists have a perception that the majority opinion on Twitter is more liberal leaning, the third hypothesis (H3) – the mediating role of journalists' perceived opinion gap in the relationship between ideology and outspokenness on Twitter – was proposed and tested. To function as a mediator, there should be a significant effect of the independent variable (political ideology) on the mediating variable (opinion gap with Twitter users) as well as a significant effect of the mediator on the dependent variable (outspokenness on Twitter); also, a significant relationship

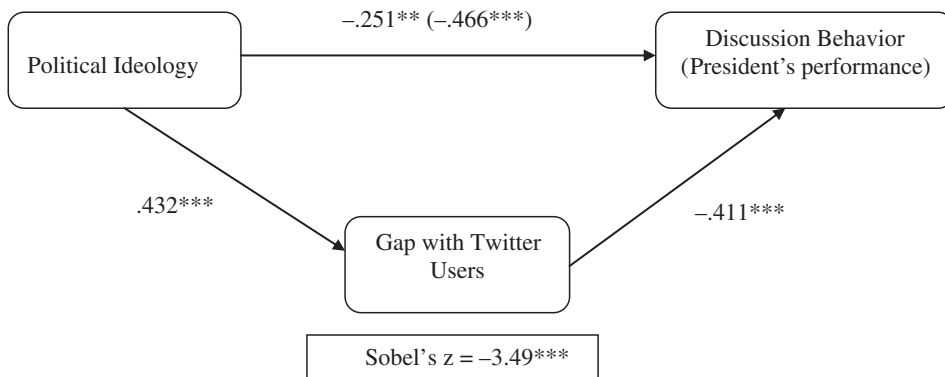


Figure 1. Path diagram of mediating effects of opinion gap with Twitter users in the relationship between ideology and discussion about the President's performance on Twitter.

Note: The values in the figure are standardized regression coefficients. The coefficient in parentheses represents the direct influence of political ideology on discussion about the President's performance before adding the mediating variable (gap with Twitter users) as a control variable. For Sobel test, unstandardized coefficients were used. $*p < .05$, $**p < .01$, $***p < .001$.

between the independent variable and the dependent variable is reduced when controlling the mediating variable (Baron & Kenny, 1986).

Regarding the evaluation of the President's performance, the relationship between the journalists' political ideology and outspokenness on Twitter was mediated by the discrepancy with the majority opinion of Twitter users (see Figure 1). As demonstrated in Figure 1, both the effect of ideology on the opinion gap with Twitter users ($\beta = .432$, $p < .001$) and the effect of the opinion gap with Twitter users in discussions about the President's evaluation ($\beta = -.411$, $p < .001$) were significant. In addition, the regression coefficient of political ideology on discussion behavior was reduced when controlling for the mediating variable (from $\beta = -.466$, $p < .001$ to $\beta = -.251$, $p < .01$).

Another path analysis was conducted to test for the US–Korea FTA issue. Results also showed that the opinion gap with Twitter users mediated the relationship between journalists' political ideology and their outspokenness on Twitter (see Figure 2). There was a significant effect of political ideology on the opinion gap with Twitter users ($\beta = .412$, $p < .001$) as well as a significant relationship between the gap with Twitter users and discussion about the FTA issue on Twitter ($\beta = -.276$, $p < .01$). Furthermore, it turned out that a significant relationship between ideology and discussion behavior was reduced when controlling the mediating variable (gap with Twitter users; from $\beta = -.306$, $p < .001$ to $\beta = -.234$, $p < .05$). Therefore, H3 was supported.

Discussion

This study examined whether traditional communication theories about public opinion, specifically the SOS theory, are applicable to the social media context, Twitter, in predicting journalists' communicative behaviors. An examination of journalists' discussions on Twitter has significant implications in the sense that journalists have been regarded as elites who help formulate and lead public opinion. If journalists avoid or do not speak their opinions, their silence may lead to critical consequences: that is, public opinion may

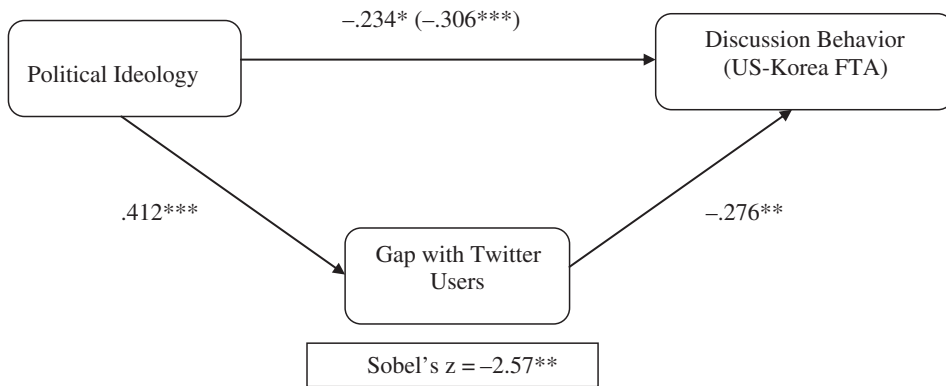


Figure 2. Path diagram of mediating effects of opinion gap with Twitter users in the relationship between ideology and discussion about FTA on Twitter.

Note: The values in the figure are standardized regression coefficients. The coefficient in parentheses represents the direct influence of political ideology on discussion behavior about the US–Korea FTA before adding the mediating variable (gap with Twitter users) as a control variable. For Sobel test, unstandardized coefficients were used. $*p < .05$, $**p < .01$, $***p < .001$.

be misrepresented. In addition, this study extends the current literature by explicating the underlying mechanisms of outspokenness on Twitter space, noting the potential mediating role in the relationship between political ideology and discussion behaviors on Twitter.

The findings suggest that while both a perceived gap and political ideology affected journalists' outspokenness, fear of isolation was not an influencing factor. The results of this study are congruent with previous studies that people are influenced by their perceptions of majority opinion in an online environment, regardless of their perceptions of the general public opinion (Chang & Park, 2012; Yun & Park, 2011). Previous studies have shown that the influence of fear of isolation is significantly attenuated in online settings (Ho & McLeod, 2008; Yun & Park, 2011). This current study expands that line of research by adding the context of Twitter usage and providing evidence that the opinion gap may have a mediating role in the relationship between journalists' political ideology and their outspokenness on Twitter.

The present study investigated what factors affect journalists in their engagement in expressing their opinions on Twitter by looking at two controversial issues in South Korea. Those topics are regarded as issues on which politically liberal and conservative viewpoints were contradictory at the time this study was conducted. The South Korean context provides a unique setting for this investigation in that the three major newspapers and two broadcast networks that dominate the media industry are considered conservative while the Internet media, including Twitter, is generally regarded as liberal (Kim & Kim, 2012; Song, 2007), making this particular environment favorable for observing how journalists act on Twitter relative to their own political ideology.

To begin with, the current study, which is based on previous studies regarding the SOS theory, examined whether the perceptions of majority opinion, fear of isolation, and ideology affect journalists' discussion behaviors on Twitter. The findings showed that journalists kept silent when they perceived that their opinions differed from those of the majority. Specifically, the perceived discrepancy between journalists' opinions and the

majority opinion on Twitter was a significant and negative predictor, which suggests that journalists who think their opinions differ from Twitter users are less likely to discuss controversial issues on Twitter. Specifically, the larger the discrepancy perceived by the journalists, the less willing the journalists were to post their opinions on Twitter. The findings indicate that journalists as well as the general public are influenced by opinion gaps with majority opinions when speaking up on Twitter space, suggesting that the SOS can be applied to explain the outspokenness by opinion elites, on Twitter. However, congruent with previous studies (Neuwirth et al., 2007; Yun & Park, 2011), the current study found that the perceived general climate of opinion did not influence journalists' discussions on Twitter.

More importantly, findings showed that the journalists' perceived opinion gap with Twitter users not only directly (and negatively) influenced their outspokenness on Twitter, but that it mediated the relationship between political ideology and outspokenness. That is, depending on their political ideology, some journalists (i.e., conservatives) perceived a greater gap with the majority opinion on Twitter while other (liberal) journalists were less inclined to do so. Indeed, the current study demonstrates that Korean journalists perceived that the majority opinion on Twitter is more liberal leaning (H2). This makes sense in consideration of South Korea's distinctive media environment in which the online sphere, including Twitter, is regarded as politically more liberal leaning (Kang, 2013; Kim & Kim, 2012). Therefore, conservative journalists may feel a greater discrepancy or sense that the majority opinion on Twitter is different from their own perspectives, which, in turn, may lead them to remain silent (i.e., to withhold their opinions) on controversial issues when using Twitter. From a different perspective, the findings of this study may represent one of the nuanced realities about the South Korean media, which is attributable to specific historical and social conditions: that is, the main and dominant media, which are considered conservative, support the established social power, which may motivate liberals to use the new and alternative media based on new technology as a way to confront the conservatives. Kim and Hamilton (2006) referred to this phenomenon 'as an increasing fragmentation – a division between what could be called a progressive sphere and a conservative sphere' (p. 552). The division may motivate both conservative and liberal journalists to consider members of the public who are ideologically different to be 'non-public' or to disregard them.

Conclusion

In summary, the results of this study document that the SOS can be applied to the social media context, Twitter. In addition, journalists, who are regarded as agenda setters of public opinion, may not express their opinions on Twitter when they perceive their opinions differ from those of the majority of Twitter users. Additionally, fear of isolation, which has been used to explain individuals' outspokenness regarding political issues, turned out in this study to be a nonsignificant factor influencing Korean journalists' opinion expression behaviors on Twitter. Importantly, the current study suggests that it is the perceived opinion gap with Twitter users that may play a key role in explaining how and why political ideology is associated with journalists' outspokenness on Twitter. That is, journalists' ideology influences the gap between their own opinion and the majority opinion on Twitter, which, in turn, may affect their engagement in discussion about controversial issues on Twitter. The findings of this study are consistent with previous

studies which indicate that it is not the discrepancy of majority opinion in the general public but rather, in some cases, the discrepancy of majority opinion in online forums that influences participants' willingness to speak up. Yet, at the same time in online environments, the influence of the fear of isolation on reluctance to express minority opinion may be significantly reduced (Ho & McLeod, 2008; Yun & Park 2011).

These findings are meaningful in several ways. First, this study shows that the SOS, which focuses on the general public, is applicable to opinion elites, particularly journalists, in the social media context. We acknowledge that the SOS theory is based on investigations regarding the general public and that journalists' experiences may not be the same as those of the general public. However, it is precisely for that reason our study is meaningful. The current study examined whether the SOS theory may be applicable to opinion leaders, such as journalists. The findings showed that even opinion leaders were less willing to discuss on Twitter their evaluations of the President's performance and their opinions about the US–Korea FTA when they perceived a gap between their opinions and the opinions of others on Twitter. Considering the role of journalists as opinion leaders, their silence may carry greater weight than that of other groups when the silence is influenced by perceptions of an opinion gap.

In addition, this result may suggest a changing and more powerful role for the public in online media contexts. Specifically, the theory of SOS, as applied in this study, assumes that the media (i.e., journalists) exert a strong influence on the public. However, in social media contexts, the public may carry greater weight due to the ability of Twitter users to respond immediately, publicly, and directly to journalists and, as a result, affect journalists' willingness to speak up or, in the alternative, to remain silent.

This study also showed that journalists' outspokenness is closely related to their own political ideology, which suggests that if journalists perceive that the perspectives of Twitter users are more liberal than their own, then conservative journalists may be less likely to speak up on Twitter. This study suggests with caution that the dominant opinion on Twitter may not be representative of public opinion in general because the public as well as opinion leaders tend to express their opinions on Twitter more freely when they perceive their opinions are in the majority among other Twitter users. For some issues, if the public perceives that other Twitter users are politically liberal, then the voice of conservatives on Twitter may shrink through the process of the SOS.

However, over time the dominant ideology of the majority of Twitter users may change depending on the issues. Already such changes have been observed in South Korea where, in the early stage of Twitter adoption, most of the Twitter users were liberals, as journalists' perceptions in this study suggest. However, in the 2012 presidential elections, those who favored a conservative ideology also actively used Twitter to communicate with the younger generation and to lead public opinion in the direction that the conservatives favored (Kang, 2013). Based on that observation, we can see that the dominant voices of Twitter may change and, therefore, future studies may need to address how people's perceptions of Twitter change depending on political issues.

This study has several limitations. First, the response rate was rather low. However, considering the fact that Twitter adoption among journalists is still in an early stage in South Korea, this study may provide a basis for understanding the opinions of journalists who already use Twitter. Second, the sampling in the current study included nine major national newspapers and two network television stations. Although the sample of the current study, which were provided by the Korean Press Foundation (KPF), can be

considered as representative of Korean journalists, the KPF list does not include all news media (e.g., emerging online news outlets) and their journalists. Therefore, future studies should examine whether journalists from other outlets, such as online news, follow similar patterns with regard to expressing their opinions on Twitter.

Despite its limitations, as the first study of journalists' outspokenness on Twitter, this study is meaningful because results from the survey among journalists expand the SOS theory from the general public to the elites and from offline to the context of online social media, specifically Twitter. In addition, this study introduces a mediating mechanism in which journalists' political ideology is closely related to the opinion gap on Twitter and, in the Korean context, influences their outspokenness about controversial issues.

Notes

1. This study treated the following two cases as high discrepancy (or low congruency): (1) the participants support the FTA (e.g., their score may be 5) and they perceive that the majority does not support (e.g., their scores may be 1) and (2) the participants do not support the FTA (e.g., their scores may be 1) and they perceive majority supports (e.g., their scores may be 5). This is the essentially the same way by which Ho and McLeod (2008) measured congruency of participants' opinion and their perceptions of majority opinion.
2. For the comparison of liberal and conservative journalists, from 1 to 3 were re-coded as liberal, 4 was re-coded as moderate, and from 5 to 7 were re-coded as conservative.

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References

- Baik, I. S. (2009, May 27). Twitter fever has arrived at Korea. *The Financial News*. Retrieved from http://www.fnnews.com/view?ra=Sent0901m_View&corp=fnnews&arcid=090527183435&cDateYear=2009&cDateMonth=05&cDateDay=27
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182. doi:10.1037/0022-3514.51.6.1173
- Chang, W.-y., & Park, H. W. (2012). The network structure of the Korean blogosphere. *Journal of Computer Mediated Communication*, *17*, 216–230. doi:10.1111/j.1083-6101.2011.01567.x
- Converse, P. E. (2006/1964). The nature of belief systems in mass publics (1964). *Critical Review*, *18*(1–3), 1–74. doi:10.1080/08913810608443650
- Glynn, C. J., Hayes, A. F., & Shanahan, J. (1997). Perceived support for one's opinions and willingness to speak out: A meta-analysis of survey studies on the 'spiral of silence.' *Public Opinion Quarterly*, *61*, 452–463. doi:10.1086/297808
- Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005a). Validating the willingness to self-censor scale: Individual differences in the effect of the climate of opinion on opinion expression. *International Journal of Public Opinion Research*, *17*, 443–455. doi:10.1093/ijpor/edh072

- Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005b). Willingness to self-censor: A construct and measurement tool for public opinion research. *International Journal of Public Opinion Research*, 17, 298–323. doi:10.1093/ijpor/edh073
- Ho, S. S., & McLeod, D. M. (2008). Social-psychological influences on opinion expression in face-to-face and computer-mediated communication. *Communication Research*, 35, 190–207. doi:10.1177/0093650207313159
- Hoffman, N. V. (1980). Public opinion polls: Newspapers making their own news? *Public Opinion Quarterly*, 44, 572–573. doi:10.1086/268624
- Hsu, C. L., & Park, H. W. (2012). Mapping online social networks of Korean politicians. *Government Information Quarterly*, 29, 169–181. Retrieved from <http://dx.doi.org/10.1016/j.giq.2011.09.009>
- Huang, H. (2005). A cross-cultural test of the spiral of silence. *International Journal of Public Opinion Research*, 17, 324–345. doi:10.1093/ijpor/edh065
- Jeffres, L. W., Neuendorf, K. A., & Atkin, D. (1999). Spirals of silence: Expressing opinions when the climate of opinion is unambiguous. *Political Communication*, 16(2), 115–131. doi:10.1080/105846099198686
- Kang, K. H. (2013, June 16). Conservatives have disappeared on Twitter. *Voice of the People*. Retrieved from <http://www.vop.co.kr/A00000645436.html>
- Kim, Y. (2011). Understanding j-blog adoption: Factors influencing Korean journalists' blog adoption. *Asian Journal of Communication*, 21(1), 25–46. doi:10.1080/01292986.2010.524229
- Kim, E. G., & Hamilton, J. W. (2006). Capitulation to capital? OhmyNews as alternative media. *Media, Culture & Society*, 28, 541–560. doi:10.1177/0163443706065028
- Kim, S. H., Han, M., Shanahan, J., & Berdayes, V. (2004). Talking on 'Sunshine in North Korea': A test of the spiral of silence as a theory of powerful mass media. *International Journal of Public Opinion Research*, 16(1), 39–62. doi:10.1093/ijpor/16.1.39
- Kim, M. G., & Kim, J. (2012). Comparing the effects of newspaper, TV News, and the Internet news on the evaluation of a major political candidate: Latent growth modeling with longitudinal panel data from the 2007 presidential campaign in South Korea. *International Journal of Public Opinion Research*, 24(1), 62–78. doi:10.1093/ijpor/edr046
- Korea Audit Bureau of Circulations. (2012, December 14). *Annual report on the circulation of daily newspapers* [News Release]. Retrieved from <http://www.kabc.or.kr>
- Lasorsa, D. L. (1991). Political outspokenness: Factors working against the spiral of silence. *Journalism Quarterly*, 68(1/2), 131–140. doi:10.1177/107769909106800114
- Lee, E.-J. (2004). Effects of visual representation on social influence in computer-mediated communication. *Human Communication Research*, 30, 234–259. doi:10.1111/j.14682958.2004.tb00732.x
- Lee, E.-J. (2006). When and how does depersonalization increase conformity to group norms in computer-mediated communication? *Communication Research*, 33, 423–447. doi:10.1177/0093650206293248
- Lee, H. J., & Ban, H. (2011). Political cognitive structure of different social media user groups: A comparison between multi users, Twitter users, Facebook users and non-users using the Galileo model. *Journal of Communication Research*, 48(2), 5–43.
- McDevitt, M., Kioussis, S., & Wahl-Jorgensen, K. (2003). Spiral of moderation: Opinion expression in computer-mediated discussion. *International Journal of Public Opinion Research*, 15, 454–470. doi:10.1093/ijpor/15.4.454
- Moy, P., Domke, D., & Stamm, K. (2001). The spiral of silence and public opinion on affirmative action. *Journalism & Mass Communication Quarterly*, 78(1), 7–25. doi:10.1177/107769900107800102
- Neuwirth, K., & Frederick, E. (2004). Peer and social influence on opinion expression. *Communication Research*, 31, 669. doi:10.1177/0093650204269388
- Neuwirth, K., Frederick, E., & Mayo, C. (2007). The spiral of silence and fear of isolation. *Journal of Communication*, 57, 450–468. doi:10.1111/j.1460-2466.2007.00352.x
- Noelle-Neumann, E. (1974). The spiral of silence. A theory of public opinion. *Journal of Communication*, 24(2), 43–51. doi:10.1111/j.1460-2466.1974.tb00367.x
- Oshagan, H. (1996). Reference group influence on opinion expression. *International Journal of Public Opinion Research*, 8, 335–354. doi:10.1093/ijpor/8.4.335

- Papacharissi, Z. (2009). The virtual sphere 2.0: The internet, the public sphere and beyond. In P. N. Howard & A. Chadwick (Eds.), *Handbook of internet politics* (pp. 230–245). London: Routledge.
- Patterson, T. E. (2005). Of polls, mountains U.S. journalists and their use of election surveys. *Public Opinion Quarterly*, 69, 716–724. doi:10.1093/poq/nfi065
- Pew Internet & American Life Project. (2011). *Twitter and social networking in the 2010 midterm elections*. Retrieved from <http://pewresearch.org/pubs/1871/internet-politicsfacebook-twitter-2010-midterm-elections-campaign>
- Price, V., & Cappella, J. N. (2002). Online deliberation and its influence: The electronic dialogue project in campaign 2000. *IT & Society*, 1, 303–329.
- Price, V., Nir, L., & Cappella, J. N. (2006). Normative and informational influences in online political discussions. *Communication Theory*, 16(1), 47–74. doi:10.1111/j.1468-2885.2006.00005.x
- Salmon, C. T., & Kline, F. G. (1985). The spiral of silence ten years later: An examination and evaluation. In K. R. Sanders, I. Kaid, & D. Nimmo (Eds.), *Political communication yearbook* (pp. 3–30). Carbondale and Edwardsville, IL: University Press.
- Salmon, C. T., & Neuwirth, K. (1990). Perceptions of opinion climates and willingness to discuss the issue of abortion. *Journalism Quarterly*, 67, 567–577. doi:10.1177/107769909006700312
- Scheufele, D. A. (2008). Spiral of silence theory. In W. Donsbach & M. W. Traugott (Eds.), *The SAGE handbook of public opinion research* (pp. 173–183). London: SAGE.
- Scheufele, D. A., & Moy, P. (2000). Twenty-five years of the spiral of silence: A conceptual review and empirical outlook. *International Journal of Public Opinion Research*, 12(1), 3–28. doi:10.1093/ijpor/12.1.3
- Sharmir, J. (1997). Speaking up and silencing out in face of a changing climate of opinion. *Journalism & Mass Communication Quarterly*, 74, 602–614. doi:10.1177/107769909707400313
- Shen, F., Wang, N., Guo, Z., & Guo, L. (2009). Online network size, efficacy, and opinion expression: Assessing the impacts of Internet use in China. *International Journal of Public Opinion Research*, 21, 451–476. doi:10.1093/ijpor/edp046
- Song, Y. (2007). Internet news media and issue development: A case study on the roles of independent online news services as agenda-builders for anti-US protests in South Korea. *New Media & Society*, 9, 71–92. doi:10.1177/1461444807072222
- Takhteyev, Y., Gruzd, A., & Wellman, B. (2011). Geography of Twitter networks. *Social Networks*, 34(1), 73–81. doi:10.1016/j.socnet.2011.05.006
- Yun, W. G., & Park, S. Y. (2011). Selective posting: Willingness to post a message online. *Journal of Computer-Mediated Communication*, 16, 201–227. doi:10.1111/j.1083-6101.2010.01533.x
- Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge: Cambridge University Press.