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To cite this article: Michael Chan (2018) Reluctance to Talk About Politics in Face-to-Face and Facebook Settings: Examining the Impact of Fear of Isolation, Willingness to Self-Censor, and Peer Network Characteristics, *Mass Communication and Society*, 21:1, 1-23, DOI: [10.1080/15205436.2017.1358819](https://doi.org/10.1080/15205436.2017.1358819)

To link to this article: <https://doi.org/10.1080/15205436.2017.1358819>



Accepted author version posted online: 26 Jul 2017.
Published online: 17 Aug 2017.



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Reluctance to Talk About Politics in Face-to-Face and Facebook Settings: Examining the Impact of Fear of Isolation, Willingness to Self-Censor, and Peer Network Characteristics

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This study examines citizens' willingness to publicly express support for a political party or candidate face-to-face and on Facebook during an election. Findings from a survey showed that fear of social isolation (FSI) exhibited a negative indirect effect on public expression about the election through willingness to self-censor (WTSC) for both communication environments. The indirect effect through WTSC was contingent on perceived political disagreement within homophilous peer networks contributing to a hostile opinion climate. Moreover, in face-to-face interactions those with higher levels of FSI were less likely to express support in heterogeneous offline networks with high levels of disagreement but were more likely to do so in homophilous networks that share similar political views. The study demonstrates the utility of combining a dispositional approach and friendship-based reference groups to the examination of key spiral of silence mechanisms at the individual level.

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At the core of any democracy is the active participation of citizens engaged “in behaviors designed to influence, directly or indirectly, the quality of public life for oneself and others” (Delli Carpini, 2004, p. 396). One such behavior is political discussion, and its relationship with democratic engagement is one of the most studied aspects of political communication research. The positive linkages between political discussion and participation online and offline are well-established in the literature (e.g., Shah, Cho, Eveland Jr., & Kwak, 2005; Valenzuela, Kim, & Gil de Zúñiga, 2012). More recent research extended these findings to expression on social media, not only in the U.S. context (e.g., Gil de Zúñiga, Molyneux, & Zheng, 2014) but also Asian societies at different stages of democratization, including full democracies like Taiwan and South Korea, semi-democracies like Hong Kong, and even authoritarian China (Willnat & Aw, 2014).¹ Social media provide not only a convenient and cost-effective channel for political expression among citizens in modern democracies but also an online space in authoritarian political systems where such expressions can potentially serve as catalysts for political change (Howard & Parks, 2012).

In contrast, less work has examined the factors that motivate citizens’ unwillingness to express their political opinions. One body of relevant literature is spiral of silence (SoS) theory (Noelle-Neumann, 1974), which posits that people may be reluctant to express their opinions because of the perceived social costs and consequences that may entail, such as criticism, scrutiny, and ostracization from one’s peers. They may judge the opinion climate to be unfavorable to their views and choose to remain silent rather than speak out. This leads to the pertinent question: Under what conditions are self-censorship tendencies likely to occur? Historically, much of the SoS literature has focused on reluctance to express opinions in face-to-face contexts relative to an opinion climate. There has been much less attention on climates derived from reference groups such as friendship networks (Scheufele & Moy, 2000). The examination of such groups is particularly important given the rise of social network sites like Facebook where individual expressions about politics can be broadcasted simultaneously to hundreds if not thousands of “friends.” Indeed, there is already some descriptive evidence that Facebook users are reluctant to express opinions about controversial issues because they are concerned how their Facebook friends would react (Hampton et al., 2014).

Drawing from recent calls on the need for more robust measures to examine SoS processes in cross-cultural contexts (Matthes et al., 2012), and the growing use of social media platforms for political expression (Rainie, Smith, Schlozman, Brady, & Verba, 2012), this study explores the roles of trait personality and peer network characteristics in inhibiting political

¹Of course, the scope of participation is constrained by a country’s political system. For example, Chinese citizens cannot elect its national government. The key point here is that those who express political views on social media are more likely to engage in offline and online politics within the boundaries of the respective political systems.

expression in face-to-face and Facebook contexts. It focuses on the core individual-level mechanisms of SoS (e.g., fear of social isolation (FSI) and willingness to self-censor (WTSC)) and the moderating roles of political disagreement and network structure that may contribute to a hostile opinion climate. The respective roles of these factors, how they relate to each other, and how they inhibit political expression offline and on Facebook are explicated and tested with a theoretically informed model.

The study is set in Hong Kong a few weeks prior to an election. It is a suitable site because it is a semidemocratic city state under China's sovereignty that has undergone a protracted and tumultuous period of democratization since the 1997 handover (Chan, 2016a). This has led to a very polarized political opinion climate that provides the prerequisite contentious environment that may accentuate self-censorship tendencies. Hong Kong also has one of the highest Facebook penetration rates in the world at more than 60% (HKEJ, 2014), and studies have demonstrated positive relationships between Hong Kong citizens' use of Facebook and political engagement (Chan, 2016b; Tang & Lee, 2013). Given the embeddedness of the technology in Hong Kong and around the world, the potential of Facebook to accentuate or inhibit political expression deserves attention.

LITERATURE REVIEW

Fear of Isolation, Willingness to Self-Censor, and Political Expression

A core assumption of Noelle-Neumann's (1977) SoS theory postulates that "most people are afraid of becoming isolated from their environment" (p. 144). This fear of isolation instills a powerful motivation for individuals to conform to prevailing public opinion. When individuals perceive their views to be in the minority, they are more likely to stay silent (i.e., self-censor) compared to those who perceive their views to be in the majority so as to avoid social disapproval or sanction. Meta-analyses of more than four decades of SoS research have found consistent support for this basic mechanism (see Glynn & Huges, 2014), but the size of the effects have remained small. Some scholars have attributed this to the lack of consistent and reliable measures to test basic SoS assumptions, and the neglect in accounting for variances based on individual personality differences (Matthes & Hayes, 2014). For example, certain people are psychologically more predisposed to be more fearful than others. Therefore, efforts in the past decade have focused on developing and validating trait-based measures that can be applied across different scenarios and cultures to test the universal applicability of SoS mechanisms. Proponents have called this the "dispositional approach" (Matthes et al., 2012).

Two such measures were the WTSC scale, which measures the extent that people withhold their opinions when they perceive that others may disagree with them

(Hayes, Glynn, & Shanahan, 2005), and the FSI scale (Hayes, Matthes, & Eveland Jr., 2011), which is the fear of being socially excluded by others. Based on the logic of SoS, higher levels of FSI and WTSC should both inhibit opinion expression in hostile opinion climates because those with high FSI are extra fearful about the social repercussions of saying something not shared by the majority, and those with high WTSC are especially concerned with whether their views are consistent with the pervading opinion climate. Furthermore, as argued by Matthes et al. (2012), there should be a positive relationship between FSI and WTSC because those who fear isolation should be less willing to face the social costs of expressing an opinion that is inconsistent with the opinion climate. Indeed, their comparative study tested the FSI–WTSC relationship and found significant medium-size correlations (.40–.58) in eight of the nine sampled countries, suggesting a robust relationship between the two variables among diverse political systems around the world.² Based on the extant literature, several initial hypotheses can therefore be proposed:

- H1: FSI will be negatively related to willingness to express public support for a political candidate or party.
- H2: FSI will be positively related to WTSC.
- H3: WTSC will be negatively related to willingness to express public support for a political candidate or party.

These suppositions lead to a basic mediation model with two pathways: a direct path from FSI to expression and an indirect path through WTSC. Thus,

- H4: WTSC will mediate the relationship between FSI and willingness to express public support for a political candidate or party.

The basic model accounts only for individual trait differences. The next step is to consider the potential moderating role of opinion climate.

Peer Networks as Opinion Climate: Disagreement and Network Structure

Friendship-based reference groups constitute an influential opinion climate. After all, individuals usually have more opportunities to have casual conversations and discussions about politics among their immediate social circles

²The lone exception was China, an insignificant result attributed by the authors to the highly collectivist nature of Chinese society. However, given that the correlation was .46 for South Korea, another collectivist society, the nonsignificant relationship may be due to China's authoritarian one-party political system rather than its collectivist orientation. In this regard, Hong Kong aligns much closer to South Korea than China because it has a dynamic semidemocracy where citizens can vote in district and legislative elections. In any case, the key point is that if SoS is a universal phenomenon as claimed by its adherents, there should be a relationship between FSI and WTSC in Hong Kong.

rather than through formal settings, such as town halls and public forums. Yet, SoS research has by and large focused on the sanctioning potential of society in general (i.e., the “public”) rather than through interpersonal relations (Oshagan, 1996; Scheufele & Moy, 2000). Psychologists have long noted the importance of reference groups as benchmarks in which individuals evaluate their personal attitudes, values, and behaviors (the “comparative” function), and as a source of norms, which individuals are motivated or compelled to share (the “normative” function; Kelley, 1968). Although an individual may have multiple reference groups, friendship networks can be considered one of the most important because the desire to form and maintain interpersonal attachments is one of the most fundamental human motivations (Baumeister & Leary, 1995).

Fear of isolation and attention to the opinion climate are therefore magnified for friendship networks because social sanctions can have substantive repercussions on individuals’ standing within the group, such as the loss of reputation or, more serious, being ostracized by one’s friends. The importance of reference groups was demonstrated in Oshagan’s (1996) study, showing that individuals’ willingness to speak out was more influenced by the perceived issue position of friends rather than the perceived issue position of society in general, and they were more likely to side with the reference group on an issue even though such a stance was contrary to the societal position. Similarly, Neuwirth and Frederick (2004) found that subjective perceptions of friendship norms were more influential determinants of speaking out compared to perceived majority opinion. Two characteristics of reference groups that are particularly relevant for SoS processes are explicated next.

Political Disagreement

Political disagreement refers to the extent in which individuals are exposed to opposing viewpoints (Klofstad, Sokhey, & McClurg, 2013). An extensive body of research on its role in democratic engagement have provided mixed findings. On one hand, disagreement within one’s social ties provides individuals’ with more exposure to different views and perspectives, which should encourage greater cognitive engagement with politics and engender participation. On the other hand, disagreement can lead to ambivalence, which discourages individuals from expressing their opinions because they do not want to create conflict among their social relationships (Mutz, 2002).

In the context of SoS, subjective perceptions of disagreement within one’s social network constitutes an important opinion climate cue because those who fear social isolation or are already inclined to self-censor may be further inhibited from expressing their opinions if they perceive their views to be in the minority, or are one of several competing views. This assumption of SoS theory has

consistent support from meta-analyses of the literature (e.g., Glynn & Huye, 2014) though it has not been examined in a theoretical framework that combines trait personality and peer network characteristics. However, scholars have articulated some possibilities. For example, Hayes et al. (2011) pointed out that FSI may “moderate the effects of perceived opinion congruence on public opinion expression rather than just directly influence expression” (p. 458), and Hayes et al. (2005) asserted that WTSC “may play an important role in opinion expression as a moderator of the effect of perceptions of the climate of opinion and willingness to speak out” (p. 317). Both assumptions situate FSI and WTSC as moderators of the opinion climate and expression relationship, but the authors were also open to the possibility that the traits can be moderated by other variables. Because the previous section has already explicated a basic mediation model of FSI → WTSC → expression based on the extant literature, the resulting model would be overly complex if FSI and WTSC also served as moderators. Therefore, it would be more appropriate for the current study to situate peer network characteristics as the moderator, such that a more hostile opinion climate should influence the magnitude of FSI and WTSC effects on political expression. This provides a more parsimonious framework to examine the mutual influences of personality traits, opinion climate, and political expression.

Network Structure

Network structure in the present study refers to individuals’ perceptions on whether their peer networks are different (i.e., heterogeneous) or similar (i.e., homophilous) to themselves. Underlying this continuum is the sociological principle of homophily, which asserts that people are more likely to associate with people like themselves, resulting in strong ties characterized by high levels of interpersonal trust and attraction. In such networks, members typically have greater interpersonal communications and consideration of the positions of others, leading to higher levels of mutual social influence (McPherson, Smith-Lovin, & Cook, 2001). One possible consequence of a very homophilous network structure is that members are more susceptible to peer pressure because of the need to conform to predominant norms and opinions shared by many members. Failure to do so may lead to subsequent social ostracization (Stavrositu, 2011). Conversely, in a more heterogeneous network structure, individuals associate with people from diverse social backgrounds and so the pressure to conform to a common norm or standard may be less.

This sociological view of network structure and its implications for social influence is somewhat different from the political literature, which is more concerned about the normative democratic implications of exposure to different political views in heterogenous networks. Such studies sometimes conflate political disagreement and structure of social networks, assuming that contact

with dissimilar others equated to exposure to different viewpoints and ideas. However, in the context of SoS, it would be more theoretically sound to separate the two. One reason is that it better reflects situations in real life, where some individuals may belong in homophilous networks but have very different political views, and others may belong in heterogeneous networks but share the same or similar political beliefs. The second reason is that the impact of political disagreement could be dependent on the perception of whether sanctions are costly or enforceable if one violates the norms, values, or beliefs of a reference group. For example, individuals in networks of high political disagreement may already be inclined not to speak out but are even more so in close-knit homophilous networks because of the greater sanctioning capability of such networks compared to heterogenous networks (Stavrositu, 2011). Based on the preceding discussions, and considering the role of personality traits, the following research questions are thus raised:

RQ1: To what extent will levels of political disagreement moderate the (a) direct and (b) indirect effects of FSI on willingness to express public support for a political candidate or party?

RQ2: To what extent will network structure moderate the (a) direct and (b) indirect effects of FSI on willingness to express public support for a political candidate or party?

Figure 1 presents the proposed second-stage dual moderated mediation model that integrates FSI, WTSC, political disagreement, network structure, and expression. The starting point is the direct effect of FSI and indirect effect of FSI through WTSC on expression as explicated in the basic mediation model. The additional research questions suggest that political disagreement and network heterogeneity may moderate the magnitude of both effects.

Spiral of Silence and Facebook

Because of the potential of the Internet to engender a deliberative democracy, researchers have been particularly keen to examine whether SoS processes can also occur in online contexts. Previous findings have been mixed. For example, Ho and McLeod (2008) examined willingness to speak out about same-sex marriage in face-to-face and mediated contexts and found that people with higher levels of FSI were more likely to express an opinion in an online chatroom setting compared to a face-to-face setting. Conversely, Hampton et al.'s (2014) comparison of American's willingness to discuss the Edward Snowden/government surveillance issue face-to-face and on social network sites showed that Facebook and Twitter users were less likely to post about the issue, though unwillingness to speak out was lower for those who perceived that their

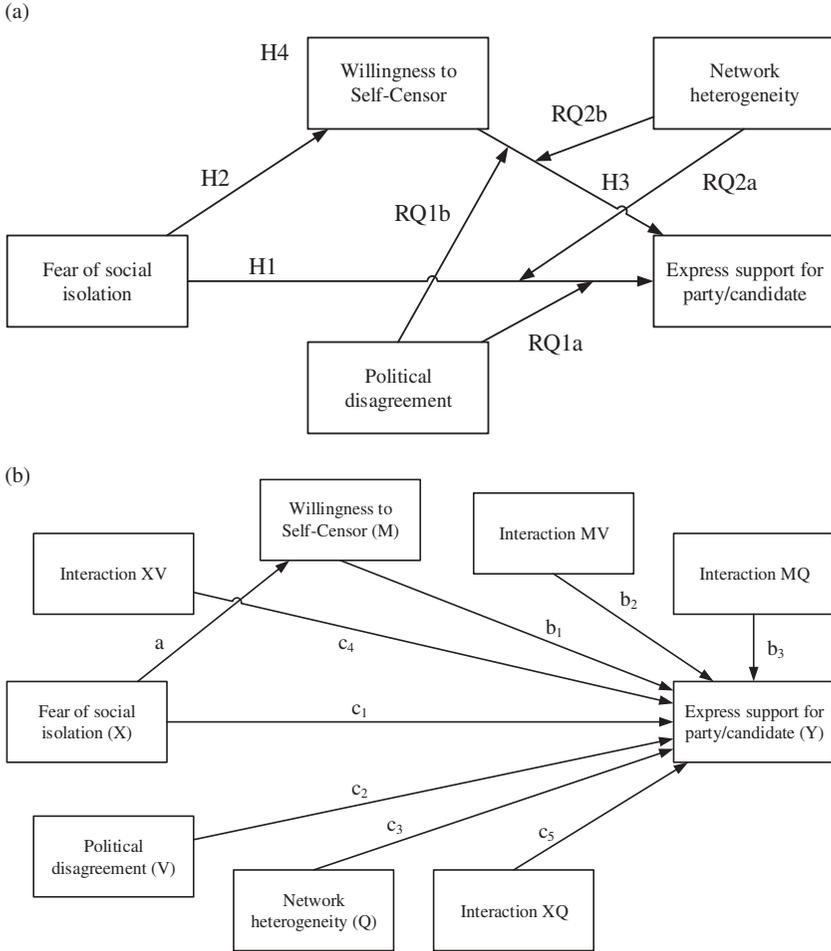


FIGURE 1 Proposed conceptual (a) and statistical (b) moderated mediation model.
 Note. Demographics (gender, age, education, income) serve as covariates but are not shown in the models.

Facebook friends agreed with their views. Yun and Park (2011) provided more nuanced findings. On one hand, users were willing to post their opinions online about abortion regardless of whether they perceived their stance to be in the majority or minority offline. Like the findings of Ho and McLeod, this suggests that online settings can liberate individual expression by alleviating fear of sanctions. On the other hand, the perceived opinion climate within the online forum influenced willingness to post, such that expression was more likely when

individuals perceive congruence between their opinion and the majority opinion online.

One way to categorize these diverse findings is to take into account the degree in which a person's communications are anonymous (how much is known about who individuals are interacting with) and identifiable to others (how much others know about the individual; Rössler & Schulz, 2014). Anonymous online communications typically have high anonymity and low identifiability so that users are less fearful of the consequences of what they express online because they are not known to the audience. Therefore, the social costs of expressing minority views are relatively low. However, communications on Facebook are identifiable because users' information is attached to all their Facebook posts. Given that Facebook is used predominantly to maintain relationships with existing real-world friends (Ellison, Steinfield, & Lampe, 2007), the opinion climate and sanctioning capability (e.g., being "unfriended") of reference groups become more salient. This is further accentuated by several features of the Facebook architecture. In face-to-face discussions about politics, it is highly unlikely that individual viewpoints and positions on issues would be immediately disseminated across the whole reference group. Instead, only those physically present during the discussions would be able to agree, disagree, support, or sanction the individual, and perhaps later they may relay the opinion to others. In Facebook, individuals' posts reach a wider audience, such as their friends and even the general public, and are therefore subject to greater scrutiny from others. Moreover, although informal spoken communications are ephemeral, expressions in Facebook are instantaneously displayed on the Facebook feeds of others and remain in place for a longer period.

Indeed, recent Facebook-based studies have provided tentative support for the assumptions of SoS theory (Gearhart & Zhang, 2015; Kwon, Moon, & Stefanone, 2015). More specifically, Kwon et al. found that FSI was positively related to WTSC, which in turn was related to less likelihood of posting about politics. The findings are consistent with the proposed mediation model explicated earlier for face-to-face contexts (i.e., FSI → WTSC → expression).³ However, to what extent peer network characteristics would influence the relationships has not been examined. Nor has a common framework been offered to test the SoS mechanisms in both offline and Facebook contexts. Therefore, the four research questions proposed in the previous section (RQ1a, RQ1b, RQ2a, RQ2b) would also be examined for the Facebook context.

³ It should be noted that their findings were based on separate regression models rather than a single mediation model with analyses of indirect effects.

METHOD

Sample

The sample was derived from a computer-assisted telephone interviewing survey conducted November 9–14, 2015, by a university-affiliated research centre in Hong Kong. Because the 2015 Hong Kong District Council elections were to be held November 22, the salience of political news coverage and visibility of street-level campaigning were relatively high during the data collection period. Target respondents were all Cantonese-speaking local residents between 18 and 70 years of age, and randomized calls were made based on a sampling frame generated from the latest Hong Kong residential phone directories. A total of 804 interviews were completed with a response rate of 30% following American Association for Public Opinion Research RR4. Of the sample, 504 of respondents (63%) were users of Facebook, and they formed the sample for the current analysis.

Measures

Fear of Social Isolation. Respondents indicated their level of agreement, from 1 (*strongly disagree*) to 5 (*strongly agree*), to five questions adapted from the FSI scale (Hayes et al., 2011): (a) “It is scary to think about not being invited to social gatherings by people I know”; (b) “One of the worst things that could happen to me is to be excluded by people I know”; (c) “It would bother me if no one wanted to be around me”; (d) “I dislike feeling left out of social functions, parties, or other social gatherings”; and (e) “It is important to me to fit into the group I am with.” Answers were then averaged to form the scale ($M = 3.17$, $SD = .85$, $\alpha = .75$).

Willingness to Self-Censor. Respondents indicated their level of agreement, from 1 (*strongly disagree*) to 5 (*strongly agree*), to eight questions adapted from the WTSC scale (Hayes et al., 2005): (a) “It is difficult for me to express my opinion if I think others won’t agree with what I say”; (b) “There have been many times when I have thought others were wrong but I didn’t let them know”; (c) “When I disagree with others, I’d rather go along with them than argue about it”; (d) “It is easy for me to express my opinion around others who I think will disagree with me” (reverse); (e) “I’d feel uncomfortable if someone asked my opinion and I knew he or she wouldn’t agree with me”; (f) “I tend to speak my opinion only around friends or other people I trust”; (g) “It is safer to keep quiet than publicly speak an opinion that you know most others don’t share”; and (h) “If I disagree with others, I have no problem letting them know it” (reverse; $M = 3.19$, $SD = .74$, $\alpha = .82$).

Offline Network Heterogeneity. Network heterogeneity serves as an indicator of network structure and the extent that individuals perceive their social networks to be different from themselves. To measure this, respondents first indicated the extent in which their friendship networks are similar to them (1 = 0%–20%, 2 = 21%–40%, 3 = 41%–60%, 4 = 61%–80%, 5 = 81%–100%): (a) “What percentage of your friends in your everyday life would you say have the same social background as you?” and (b) “What percentage of your friends in your everyday life would you say have the same moral values as you?” These two items measure degree of homophily based on evidence that people with similar demographics and social values interact with one another more often (McPherson et al., 2001). Because network heterogeneity is the opposite of homophily, the scale was reverse-coded such as higher values represented greater heterogeneity ($M = 3.06$, $SD = 1.14$, $r = .82$, $p < .001$).

Facebook Network Heterogeneity. The same two questions of offline network heterogeneity were adopted, but with minor modifications to reflect the Facebook context, for example, “Of your Facebook ‘friends’ what percentage would you say have the same social background as you?” ($M = 3.33$, $SD = 1.12$, $r = .78$, $p < .001$).

Political Disagreement Offline. Respondents indicated the extent in which their political views are similar to their friends (1 = 0%–20%, 2 = 21%–40%, 3 = 41%–60%, 4 = 61%–80%, 5 = 81%–100%): “What percentage of your friends in your everyday life would you say have the same political views as you?” Like previous studies (e.g., Scheufele, Hardy, Brossard, Waismel-Manor, & Nisbet, 2006) the measure seeks to capture the perceived diversity of political views within an individual’s social environment. The scale was then reverse-coded such that higher values represented greater disagreement ($M = 2.67$, $SD = 1.12$). There was a moderate correlation between heterogeneity and disagreement ($r = .45$, $p < .001$).

Political Disagreement on Facebook. The same question was adopted for the Facebook context: “What percentage of your Facebook friends would you say have the same political views as you?” ($M = 2.95$, $SD = 1.08$). There was a moderate correlation between Facebook heterogeneity and Facebook disagreement ($r = .34$, $p < .001$).

Express Support for Political Party/Candidate Offline. Respondents indicated their level of agreement, from 1 (*strongly disagree*) to 5 (*strongly agree*), to the question, “For the upcoming election, I have expressed support for a candidate or political party among my friends” ($M = 2.45$, $SD = .87$).

Express Support for Political Party/Candidate on Facebook.

Respondents indicated their level of agreement, from 1 (*strongly disagree*) to 5 (*strongly agree*), to the question, “For the upcoming election, I have expressed support for a candidate or political party through my Facebook profile” ($M = 2.39$, $SD = 1.09$).

Demographics. Collected demographic information included age, education, and household income per month. Of the total sample, 47.6% were male. The median age was 40–44 for age ($M = 5.8$, $SD = 3.0$; indicative values: 5 = 35–39, 6 = 40–44), associate degree for education ($M = 5.59$, $SD = 1.77$; indicative values: 5 = Grades 11–12, 6 = associate degree), and HK\$30,000–39,999 for monthly household income ($M = 6.46$, $SD = 2.43$; indicative values: HK\$25,000–\$29,999, 6 = HK\$30,000–39,999, 7 = HK\$40,000–49,999).⁴

RESULTS

Testing the Basic Mediation Model (H1–H4)

The PROCESS macro for SPSS (Hayes, 2013) was used to test the hypotheses and basic mediation model. Two models, one for expression offline and one for Facebook, were tested with 5000 bias-corrected bootstrap samples and 95% confidence intervals. The Model 4 template was used with FSI (X), WTSC (M), and expression (Y) as components. Results showed that FSI was not related to expression for either offline nor Facebook settings ($B = .01$, $p = .95$; $B = .08$, $p = .16$). H1 was not supported. FSI was related to WTSC for both models ($B = .24$, $p = .001$; $B = .19$, $p = .001$) as were WTSC to expression ($B = -.13$, $p = .01$; $B = .18$, $p = .01$). H2 and H3 were supported. Moreover, there was a significant indirect effect of FSI to expression through WTSC for both offline ($-.03$), 95% confidence interval (CI) $[-.059, -.010]$, and Facebook settings ($-.03$), 95% CI $[-.073, -.006]$. H4 was supported.

Conditional Effects of Disagreement and Heterogeneity

Regression-based conditional process analysis was conducted using Model 17 of the PROCESS macro to examine the extent in which political disagreement and network structure would moderate the direct and indirect effect of FSI on expression. This approach offers a robust method with good statistical power and incorporates a parsimonious omnibus test for moderated mediation (Hayes,

⁴ HK\$10,000 is roughly equivalent to US\$1,300.

2015).⁵ FSI (X) and expressing support for the party/candidate (Y) were entered as the independent and dependent variables, respectively. WTSC was entered as the mediator (M) between X and Y. Political disagreement (V) and network heterogeneity (Q) were entered as moderators of both the direct ($X \rightarrow Y$) and indirect ($X \rightarrow M \rightarrow Y$) paths. Age, gender, education and income served as controls. Two models, one for expressing support offline (Model 1) and another for expressing support on Facebook (Model 2), were tested with 5,000 bias-corrected bootstrap samples and 95% CIs. Table 1 summarizes the betas derived from the models. The first stage of the indirect effect ($X \rightarrow M$) was the same for both models and showed that FSI was positively related to WTSC ($B = .24$, $p < .001$) after controlling for demographics.

Direct Effect of FSI (RQ1a/RQ2a)

The conditional direct effect of FSI (X) on expression (Y) was examined under different levels of network heterogeneity (Q) and political disagreement (V; i.e., mean, mean + 1 *SD*, and mean - 1 *SD*). As Table 1 showed, there was no significant relationship between FSI (X) and expression (Y) for either Model 1 ($B = .36$, $p = .15$) or Model 2 ($B = -.19$, $p = .43$). However, there was a significant interaction for Model 1 between FSI and offline network heterogeneity (XQ; $B = -.08$, $p < .05$). A closer inspection of interaction showed that it was contingent upon different levels of political disagreement (i.e., conditional moderated mediation). As shown in Table 2, high levels of offline network heterogeneity ($M = 4.19$) led to less expression under conditions of high ($M = 3.80$) and mean ($M = 2.67$) levels of political disagreement. Low levels of network heterogeneity ($M = 1.92$) led to increased expression when political disagreement was low ($M = 1.55$). In other words, those who fear isolation were less likely to express support for a candidate or party in heterogeneous networks that have diverse political views; but are more likely to speak out in homophilous networks that have similar political views. In comparison, Model 2 did not exhibit any significant interactions and the conditional direct effects in Table 2 showed that the direct effect of FSI on expression in Facebook did not vary significantly per

⁵ Alternatives to the more established regression-based approach for testing moderated mediation have been proposed in recent years, such as the latent moderated structural equation procedure based on structural equation modelling (SEM; see Cheung & Lau, *in press*; Sardeshmukh & Vandenberg, *in press*). In general, SEM approaches offer some advantages compared to regression approaches, such as taking into account measurement error through latent variable modelling, as well as model comparisons. However, the use of the latent moderated structural equation procedure is still in its infancy, and there is as yet little consensus on the best approach for testing and interpreting moderated mediation models. Therefore, the present study adopts the more established and parsimonious regression-based approach to test moderated mediation while acknowledging its general limitations relative to a SEM approach.

TABLE 1
 Path Betas of Moderated Mediation Models Predicting Party/Candidate Support Offline and on Facebook

	<i>Model 1</i>		<i>Model 2</i>	
	<i>Support Offline</i>		<i>Support on Facebook</i>	
	<i>WTSC (M)</i>	<i>Support (Y)</i>	<i>WTSC (M)</i>	<i>Support (Y)</i>
Model Components				
Constant	2.23***	1.10***	2.23***	3.17***
FSI (X)	<i>a/c</i> ₁	.24***	.24***	-.19
WTSC (M)	<i>b</i> ₁	-.01		-.27
Disagreement FtF (V)	<i>c</i> ₂	.40*		
Offline heterogeneity (Q)	<i>c</i> ₃	.10		
Disagreement on FB (V)	<i>c</i> ₂			.59**
FB heterogeneity (Q)	<i>c</i> ₃			-.55**
Interactions				
WTSC × Disagreement (MV)	<i>b</i> ₂	-.05		-.11*
WTSC × Heterogeneity (MQ)	<i>b</i> ₃	-.02		.13*
FSI × Disagreement (XV)	<i>c</i> ₄	-.05		.02
FSI × Heterogeneity (XQ)	<i>c</i> ₅	-.08*		.05
Controls				
Gender	.04	-.20**	.04	.01
Age	.01	-.02	.01	.04*
Education	.04 [†]	.11***	.04 [†]	-.05
Income	.01	.01	.01	-.04 [†]
<i>R</i> ²	.05	.20	.05	.19
<i>N</i>	516	516	514	514

Note. Betas are unstandardized coefficients. Additional data such as standard errors and confidence intervals are available from the author upon request. WTSC = willingness to self-censor; FSI = fear of social isolation;

[†]*p* < .10. **p* < .05. ***p* < .01. ****p* < .001.

different levels of political disagreement on Facebook or Facebook network heterogeneity.

Indirect Effect of FSI Through WTSC (RQ1b/RQ2b). The same moderated mediation models just specified were used to examine the extent in which political disagreement and network structure moderated the indirect effect of FSI on expression. The index of moderated mediation (Hayes, 2015) provides an omnibus test to ascertain whether the indirect effect varies at different levels of the moderators (V and Q). Results from the index showed that political disagreement negatively moderated the indirect effect for both offline (Model 1 = -.01), 95% CI [-.028, -.005] and Facebook contexts (Model 2 = -.02), 95% CI [-.050, -.004], independent of any moderating effect of network heterogeneity. Moreover,

TABLE 2
 Conditional Direct Effects of FSI and Indirect Effects of FSI Through WTSC on Party/
 Candidate Support at Difference Levels of Political Disagreement and Network Heterogeneity

		<i>Model 1</i>			<i>Model 2</i>		
		<i>Support Offline</i>			<i>Support on Facebook</i>		
		<i>95% CI</i>			<i>95% CI</i>		
		<i>Effect</i>	LL	UL	<i>Effect</i>	LL	UL
Index of partial moderated mediation							
Political disagreement		-.010*	-.028	-.005	-.020*	-.050	-.004
Network heterogeneity		.002	-.016	.023	.023*	.002	.052
Conditional indirect effects through WTSC							
Disagreement	Heterogeneity						
Low	Low	-.011	-.054	.024	-.036	-.091	.000
Low	Mean	-.008	-.036	.016	-.010	-.046	.021
Low	High	-.005	-.039	.022	.016	-.019	.063
Mean	Low	-.021	-.055	.002	-.057*	-.109	-.020
Mean	Mean	-.019*	-.043	-.002	-.031*	-.065	-.007
Mean	High	-.016	-.054	.012	-.005	-.040	.029
High	Low	-.032*	-.067	-.008	-.078*	-.148	-.029
High	Mean	-.029*	-.064	-.006	-.052*	-.108	-.013
High	High	-.027	-.077	.011	-.026	-.081	.018
Conditional direct effects of FSI							
Disagreement	Heterogeneity						
Low	Low	.131*	.002	.313	-.043	-.237	.152
Low	Mean	.044	-.077	.164	.009	-.141	.158
Low	High	-.044	-.161	.074	.060	-.105	.225
Mean	Low	.070	-.056	.197	-.017	-.167	.133
Mean	Mean	-.017	-.099	.065	.035	-.072	.141
Mean	High	-.104*	-.228	-.009	.086	-.058	.230
High	Low	.010	-.115	.134	.009	-.163	.181
High	Mean	-.078	-.202	.047	.060	-.090	.211
High	High	-.165*	-.348	-.011	.112	-.078	.302

Note: Conditional effects represent specific direct and indirect effects at different values of both moderators based on 95% bias-corrected bootstrap confidence interval (CI; 5,000 samples). Statistical significance ($p < .05$) is achieved when lower bound (LL) and upper bound (UL) CI does not include zero. Mean, high and low represent mean and +1/-1 standard deviation, respectively. Facebook disagreement: low = 1.89, mean = 2.96, high = 4.03; Facebook heterogeneity: low = 2.20, mean = 3.32, high = 4.45. Offline disagreement: low = 1.55, mean = 2.67, high = 3.80; offline heterogeneity: low = 1.92, mean = 3.06, high = 4.19. FSI = fear of social isolation; WTSC = willingness to self-censor.

Facebook network heterogeneity positively moderated the indirect effect independent of the moderating effect of political disagreement on Facebook.⁶

⁶The index was statistically significant for Model 1 even though neither the MV and MQ interactions shown in Table 1 were statistically significant. This is possible because a significant

An inspection of [Table 2](#) showed that the indirect effect of FSI through WTSC on expression was significantly negative when offline disagreement was high ($M = 3.80$) and under conditions of mean ($M = 3.06$) and low ($M = 1.92$) offline network heterogeneity, as well as mean levels of offline disagreement ($M = 2.67$) under conditions of mean offline network heterogeneity ($M = 3.06$). The same pattern of findings was also found for Model 2. The indirect effect was significantly negative with high Facebook disagreement ($M = 4.03$) under conditions of mean ($M = 3.32$) and low ($M = 2.20$) Facebook network heterogeneity, as well as mean Facebook disagreement ($M = 2.96$) under conditions of mean Facebook network heterogeneity ($M = 3.32$). In addition, mean Facebook disagreement ($M = 2.96$) negatively influenced the indirect effect when Facebook network heterogeneity was low ($M = 2.20$).

Overall, based on the models, the indirect effect of FSI through WTSC suppresses expressions of support for a political candidate or party under conditions of high political disagreement and homophilous networks in both offline and Facebook contexts. This contrasts with the direct effect of fear of isolation, which suppresses support under conditions of high offline political disagreement in offline heterogeneous networks. Implications for the findings are discussed next.

DISCUSSION

Although there is much support in the political communication literature demonstrating the positive influences of offline and online political discussion on citizen engagement in political affairs, less focus has been placed on examining why individuals choose not to express their opinions. One notable exception has been a set of studies derived from SoS theory, which have helped to elucidate the conditions in which individuals are less likely to speak out publicly on political issues. This study contributes to this strand of literature by integrating recent works on scale development and validation of concepts central to SoS mechanisms at the individual level (Hayes et al., 2005; Hayes et al., 2011), and the role of peer networks as important sources of opinion climate cues and social influence. The resulting theoretical model was then tested in face-to-face and social media contexts.

Overall, the findings of this study are generally consistent with the theoretical claims of SoS theory. First, the results demonstrated support for the basic mediation model, such that the effects of FSI on expression is mediated by WTSC in both offline and Facebook contexts.

moderation involving the variable(s) that constitute the indirect effect is not a prerequisite for inferring moderated mediation (see Hayes, 2015).

Second, additional analyses showed that the direct and indirect effects in the mediation model are contingent on factors associated with the opinion climate. One key finding is that perceived political disagreement among one's peer networks is an important contingent factor between trait personality characteristics and expression in both face-to-face and Facebook settings, at least in the context of expressing support for a political candidate or party in a contentious political environment during an election. This is because political disagreement constitutes an important opinion climate cue. Friendship-based networks are especially meaningful because they fulfill the basic desire for companionship. Hence, those inclined to self-censor when faced with opposing views are less likely to jeopardize such relationships when the individual perceives oneself to be in the minority; or there are various competing opinions.

For the indirect effect of FSI through WTSC, the pattern of indirect effects is similar across face-to-face and Facebook settings. In general, the contingent conditions of higher disagreement and lower network heterogeneity led to less expression. This is understandable from the sociological perspective of social influence. Homophilous networks are often characterized by greater interpersonal trust and attachment that places greater incentives among members to conform to group norms and values so as to gain social approval and achieve a positive sense of self (Cialdini & Goldstein, 2004). Therefore, in an opinion climate where one's friendship network is hostile to or does not share one's political views, there is greater incentive to self-censor if a person has strong attachments to that network. These findings complement recent evidence suggesting that social network sites like Facebook may not necessarily provide new channels for a deliberative citizenry because its use is closely intertwined with offline relationships (Hampton, Shin, & Lu, 2016). In fact, public expressions can be magnified in Facebook because posts are disseminated instantaneously across hundreds of friends who can interact with the content at their own time; as compared with the ephemeral nature of spoken communications among a few friends. The present findings suggest that the SoS mechanisms that operate in face-to-face contexts may under some conditions be applicable to social media contexts.

For FSI in the face-to-face condition, there was a diverged pattern of results. There was a direct negative effect of FSI contingent on high levels of disagreement in heterogeneous networks, but also a direct positive effect of FSI on expression in homophilous networks with similar political views. The contingent effect of disagreement is logical because those who fear isolation are more fearful of social ostracization from expressing a minority opinion. However, why would the effect also be contingent upon heterogeneous networks? One possible explanation is that heterogeneous networks constituted by people of different social backgrounds result in greater uncertainty, making it harder for

those high in FSI to monitor the diverse views within the opinion climate (Noelle-Neumann, 1977). Therefore, the “safe” action would be to say less. Conversely, there is greater certainty in homophilous networks, which better facilitates the scanning of the opinion climate. When such networks have high levels of political agreement the “safe” action would be to express support to conform to the pervading political views and opinions within the network and maintain one’s status in the group. This is not an outcome commonly espoused in the SoS literature, which by and large theorizes about and examines the suppression of opinions. However, the finding in this study demonstrating conditions in which FSI can lead to *greater* willingness to express support for a political candidate or party suggests that future research may need to expand the scope of SoS theory to take into account such possibilities. Some scholars have already made such a suggestion (e.g., Mutz & Silver, 2014). For Facebook, it is possible that the psychological fear of social exclusion is less salient because it is easier for individuals to observe the behaviors of their Facebook friends surreptitiously. Through such surveillance, it is easier to have a more accurate estimate of the opinion climate in which to judge whether one should speak.

Limitations, Further Research, and Practical Implications

Before concluding the study and noting its contributions and implications, it is necessary to first highlight some of its limitations. The research design adopted was not what is generally considered a “conventional” SoS study because it did not explicitly take into account congruence of individuals’ expressions with the “general public” (i.e., whether the expression has majority or minority support from society at large). As such, it was not a direct test of SoS as originally conceived (i.e., unwillingness to express an opinion in a hostile opinion climate). Therefore, the FSI → WTSC → expression mechanism needs to be tested under different opinion climate conditions. Future studies may also integrate additional variables that may moderate the mechanism. For example, it is known that those who are very interested in or have strong opinions about an issue are more likely to speak out regardless of external scrutiny or threat (Hampton et al., 2014). To what extent these moderators may cancel out the effects of FSI and WTSC are worth examining. Moreover, despite the strong theoretical foundations for the SoS mechanisms explicated in this study, they were nevertheless tested with cross-sectional data, so claims of causality would require more explicit longitudinal designs.

Measures of network structure and expressing support can also be expanded in future research. For example, the present study measured support for a candidate or party in Facebook only in a generic way. There are several actions that a user can perform to express support, and each action entails its own degree of “publicness” of one’s behavior. For example, one would surmise that to

“Like” an election candidate in Facebook is less public than posting an enthusiastic endorsement praising the candidate. Therefore, different types of Facebook behaviors may also be influenced by different opinion climate cues. Future studies using FSI and WTSC to attempt a more thorough comparison of face-to-face and social media contexts may also need to consider the content validity of the scales. For example, three of the five items in the FSI scale are phrased in ways that are biased toward social exclusion in offline settings, such as “not being invited to social gatherings,” “no one wanted to be around me,” and “left out of social functions.” In contrast, the WTSC scale items are phrased in more generic terms that do not discriminate between offline and online contexts. Therefore, adjustments to the FSI scale may be required to better encapsulate the idea of exclusion in online contexts.

It should also be emphasized that FSI is not by all means the only trait-based predictor of WTSC and political expression. Previous research has highlighted the role of communication apprehension (Neuwirth, Frederick, & Mayo, 2007), and in a collectivist society like Hong Kong, personality differences in levels of collectivism may accentuate conforming and self-censorship tendencies because such individuals place higher importance on group goals and values (Triandis, 2001). Therefore, future research can include additional psychological antecedents that may predict self-censorship tendencies and integrate cultural orientation variables that can elucidate the impact of FSI in different societies around the world (Rosenthal & Detenber, 2014). Finally, the findings are based on a sample of a specific population in a specific political election context. Therefore, the findings of the present study cannot be generalized beyond Hong Kong, and additional studies across cultures are needed to validate the utility of the dispositional approach. Moreover, this study examined only one situation (e.g., political election). Future studies should therefore incorporate more scenarios into the research design to test the cross-situational applicability of the approach.

Despite these limitations, the present study makes a notable contribution to the SoS literature by validating and testing individual-level measures central to the theory as well as bringing back and highlighting the importance of reference groups to the study of SoS. Peer network characteristics have important contingent effects on expression that can suppress yet also accentuate willingness to express one’s opinions. The use of social media technologies such as Facebook has also become part of the everyday routine for millions of people. Given that SoS theory was conceived in an era dominated by newspapers and television, the natural question posed by scholars was whether the theory’s assumptions were still applicable to the modern online media environment. The present findings suggest that there are to some extent. However, further studies are still required to fully examine the SoS processes and their consequences across mediated contexts, and whether such processes are similar or different to offline contexts. This is important given the various e-government initiatives around the world in recent years

that have implemented social media platforms to facilitate greater citizen engagement and deliberation, such as the Open Government Initiative in the United States and the Government-with-You model in Singapore (Linders, 2012). However, scholars and policymakers alike have noted that online platforms have not really fulfilled their potential to facilitate a deliberative space where citizens can engage in the exchange of ideas and views (Hartz-Karp & Sullivan, 2014). Perhaps a consideration of SoS theory and some of its mechanisms may help inform the design and implementation of social media platforms as deliberative spaces, such that potential contributors can freely express their ideas and views and would not feel threatened because they are not consistent with the “majority” opinion.

FUNDING

This work was fully supported by a grant from the Research Grants Council of the Hong Kong Special Administrative Region, China (CUHK/459713).

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REFERENCES

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. doi:10.1037/0033-2909.117.3.497
- Chan, M. (2016a). Psychological antecedents and motivational models of collective action: Examining the role of perceived effectiveness in political protest participation. *Social Movement Studies*, *15*, 305–321. doi:10.1080/14742837.2015.1096192
- Chan, M. (2016b). Social network sites and political engagement: Exploring the impact of Facebook connections and uses on political protest and participation. *Mass Communication and Society*, *19*(4), 430–451. doi:10.1080/15205436.2016.1161803
- Cheung, G. W., & Lau, R. S. (in press). Accuracy of parameter estimates and confidence intervals in moderated mediation models: A comparison of regression and latent moderated structural equations. *Organizational Research Methods*. doi:10.1177/1094428115595869
- Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology*, *55*, 591–621. doi:10.1146/annurev.psych.55.090902.142015
- Delli Carpini, M. X. (2004). Mediating democratic engagement: The impact of communications on citizens’ involvement in political and civic life. In L. L. Kaid (Ed.), *Handbook of political communication research* (pp. 395–434). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends”: Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, *12*, 1143–1168. doi:10.1111/j.1083-6101.2007.00367.x

- Gearhart, S., & Zhang, W. (2015). "Was it something I said?" "No, it was something you posted!": A study of the spiral of silence theory in social media contexts. *Cyberpsychology, Behavior, and Social Networking*, 18, 208–213. doi:10.1089/cyber.2014.0443
- Gil de Zúñiga, H., Molyneux, L., & Zheng, P. (2014). Social media, political expression, and political participation: Panel analysis of lagged and concurrent relationships. *Journal of Communication*, 64, 612–634. doi:10.1111/jcom.12103
- Glynn, C. J., & Huges, M. E. (2014). Speaking in spirals. In W. Donsbach, C. T. Salmon, & Y. Tsfati (Eds.), *The spiral of silence: New perspectives on communication and public opinion* (pp. 65–72). New York, NY: Routledge.
- Hampton, K. N., Rainie, L., Lu, W., Dwyer, M., Shin, I., & Purcell, K. (2014). *Social media and the 'spiral of silence.'* Washington, DC: Pew Research Center.
- Hampton, K. N., Shin, I., & Lu, W. (2016). Social media and political discussion: When online presence silences offline conversation. *Information, Communication & Society*. Advance online publication. doi:10.1080/1369118X.2016.1218526
- Hartz-Karp, J., & Sullivan, B. (2014). The unfulfilled promise of online deliberation. *Journal of Public Deliberation*, 10(1). Retrieved from <http://www.publicdeliberation.net/jpd/vol10/iss1/art16>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50, 1–22. doi:10.1080/00273171.2014.962683
- Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005). Willingness to self-censor: A construct and measurement tool for public opinion research. *International Journal of Public Opinion Research*, 17, 299–323. doi:10.1093/ijpor/edh073
- Hayes, A. F., Matthes, J., & Eveland, W. P., Jr. (2011). Stimulating the quasistatistical organ: Fear of social isolation motivates the quest for knowledge of the opinion climate. *Communication Research*, 40, 439–462. doi:10.1177/0093650211428608
- HKEJ. (2014). Hong Kong has 4.4 mln Facebook users. *Hong Kong Economic Journal*. Retrieved from <http://www.ejinsight.com/20140725-hong-kong-facebook-users-top-4-4-million/>
- 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
- Howard, P. N., & Parks, M. R. (2012). Social media and political change: Capacity, constraint, and consequence. *Journal of Communication*, 62, 359–362. doi:10.1111/j.1460-2466.2012.01626.x
- Kelley, H. (1968). Two functions of reference groups. In H. H. Hyman & E. Singer (Eds.), *Readings in reference group theory and research* (pp. 77–83). New York, NY: Free Press.
- Klofstad, C. A., Sokhey, A. E., & McClurg, S. D. (2013). Disagreeing about disagreement: How conflict in social networks affects political behavior. *American Journal of Political Science*, 57, 120–134. doi:10.1111/j.1540-5907.2012.00620.x
- Kwon, K. H., Moon, S.-I., & Stefanone, M. A. (2015). Unspeaking on Facebook? Testing network effects on self-censorship of political expressions in social network sites. *Quality & Quantity*, 49, 1417–1435. doi:10.1007/s11135-014-0078-8
- Linders, D. (2012). From e-government to we-government: Defining a typology for citizen coproduction in the age of social media. *Government Information Quarterly*, 29, 446–454. doi:10.1016/j.giq.2012.06.003
- Matthes, J., & Hayes, A. F. (2014). Methodological conundrums in Spiral of Silence Research. In W. Donsbach, C. T. Salmon, & Y. Tsfati (Eds.), *The spiral of silence: New perspectives on communication and public opinion* (pp. 54–64). New York, NY: Routledge.
- Matthes, J., Hayes, A. F., Rojas, H., Shen, F., Min, S.-J., & Dylko, I. B. (2012). Exemplifying a dispositional approach to cross-cultural spiral of silence research: Fear of social isolation and the

- inclination to self-censor. *International Journal of Public Opinion Research*, 24, 287–305. doi:10.1093/ijpor/eds015
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415–444. doi:10.1146/annurev.soc.27.1.415
- Mutz, D. C. (2002). The consequences of cross-cutting networks for political participation. *American Journal of Political Science*, 46, 838–855.
- Mutz, D. C., & Silver, L. (2014). Normative implications of the spiral of silence. In W. Donsbach, C. T. Salmon, & Y. Tsafati (Eds.), *The spiral of silence: New perspectives on communication and public opinion* (pp. 75–91). New York, NY: Routledge.
- Neuwirth, K., & Frederick, E. (2004). Peer and social influence on opinion expression: Combining the theories of planned behavior and the spiral of silence. *Communication Research*, 31, 669–703.
- 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, 43–51. doi:10.1111/j.1460-2466.1974.tb00367.x
- Noelle-Neumann, E. (1977). Turbulences in the climate of opinion: Methodological applications of the spiral of silence theory. *Public Opinion Quarterly*, 41, 143–158. doi:10.1086/268371
- 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
- Rainie, L., Smith, A., Schlozman, K. L., Brady, H., & Verba, S. (2012). Social media and political engagement. Retrieved from <http://www.pewinternet.org/2012/10/19/social-media-and-political-engagement/>
- Rosenthal, S., & Detenber, B. H. (2014). Cultural orientation and the spiral of silence. In W. Donsbach, C. T. Salmon, & Y. Tsafati (Eds.), *The spiral of silence: New perspectives on communication and public opinion* (pp. 187–200). New York, NY: Routledge.
- Rössler, P., & Schulz, A. (2014). Public opinion expression in online environments. In W. Donsbach, C. T. Salmon, & Y. Tsafati (Eds.), *The spiral of silence: New perspectives on communication and public opinion* (pp. 101–118). New York, NY: Routledge.
- Sardeshmukh, S. R., & Vandenberg, R. J. (in press). Integrating moderation and mediation: A structural equation modeling approach. *Organizational Research Methods*. doi:10.1177/1094428115621609
- Scheufele, D. A., Hardy, B. W., Brossard, D., Waismel-Manor, I. S., & Nisbet, E. (2006). Democracy based on difference: Examining the links between structural heterogeneity, heterogeneity of discussion networks, and democratic citizenship. *Journal of Communication*, 56, 728–753. doi:10.1111/j.1460-2466.2006.00317.x
- 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, 3–28. doi:10.1093/ijpor/12.1.3
- Shah, D. V., Cho, J., Eveland Jr., W. P., & Kwak, N. (2005). Information and expression in a digital age: Modeling internet effects on civic participation. *Communication Research*, 32, 531–565. doi:10.1177/0093650205279209
- Stavrositu, C. (2011). Social influence. In G. A. Barnett (Ed.), *Encyclopedia of social networks* (pp. 789–791). Thousand Oaks, CA: Sage.
- Tang, G., & Lee, F. L. F. (2013). Facebook use and political participation: The impact of exposure to shared political information, connections with public political actors, and network structural heterogeneity. *Social Science Computer Review*, 31, 763–773. doi:10.1177/0894439313490625
- Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality*, 69, 907–924. doi:10.1111/1467-6494.696169

- Valenzuela, S., Kim, Y., & Gil De Zúñiga, H. (2012). Social networks that matter: Exploring the role of political discussion for online political participation. *International Journal of Public Opinion Research*, 24, 163–184. doi:10.1093/ijpor/edr037
- Willnat, L., & Aw, A. (Eds.). (2014). *Social media, culture and politics in Asia*. New York, NY: Peter Lang.
- Yun, G. W., & 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