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## Can Spiral of Silence and Civility Predict Click Speech on Facebook?

Natalie Pang

Shirley S. Ho

Alex M. R. Zhang

Jeremy S. W. Ko

W. X. Low

Kay S. Y. Tan

Wee Kim Wee School of Communication and Information,  
Nanyang Technological University, Singapore

### *Author Note*

Correspondence concerning this article should be addressed to Natalie Pang, WKWSCI Building, #05-06, 31 Nanyang Link, 637718, Singapore. Email: NLSPANG@ntu.edu.sg (N. Pang).

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### **Abstract**

Opinion expressions on Facebook are characterized by “click speech” in which people express their opinions and support (or disagreement) of posts through the “like,” “comment,” and “share” buttons. This study uses a 2 (low vs. high opinion congruency) x 2 (message civility vs. incivility) between-subject factorial experiment to examine the spiral of silence on participants' likelihood to interact with social media. We randomly assigned 502 participants to one of four experimental conditions. Results indicate that the fear of isolation increased the likelihood of commenting on Facebook posts and a civil climate increased the likelihood of liking comments on Facebook posts. Findings suggest that “click-speech” could be considered a form of opinion expression.

*Keywords:* Facebook; spiral of silence; fear of isolation; opinion congruency; message civility

## **Can Spiral of Silence and Civility Predict Click Speech on Facebook?**

### **1. Introduction**

Evolving characteristics of social media now allows for various forms of opinion expressions. Facebook, for example, allows users to click “like” on posts and comments, as well as share content with others. These modes of expression allow content on social media to go viral easier and quicker compared to traditional settings, where expression may be restricted to written or spoken words. Such features contribute to the frequency, intensity, and diversity of opinion expressions.

As social media grow more pervasive with advances in mobile devices, the Internet has emerged as a space where users interact meaningfully with others and form what they perceive to be substantial relationships. Opinion expression is central to social interactions on social media: certain attributes of a post for instance, can encourage or discourage opinion expressions and participation. Although there has been much work on social media for opinion expressions and civic participation, research on how technologically-mediated cues may shape opinion expressions is still lacking (Donsbach, Tsfati, & Salmon, 2014).

### **2. Online opinion expressions and the spiral of silence**

The Spiral of Silence (SOS) theory posits that opinion expressions are dependent on individuals' evaluation of the opinion climate (Noelle-Neumann, 1974). If individuals perceive that their opinion is congruent with the opinion climate — in other words, they hold a majority-held opinion — they are more likely to express them. If they perceive their opinions to be incongruent with the opinion climate, they are likely to remain silent. SOS originally sought to explain opinion expression in face-to-face settings (Gearhart & Zhang, 2013). As mass media traditionally disseminates information to the public, it is often regarded as the main platforms for individuals to assess opinion climate (Jeffres, Neuendorf, & Atkin, 1999).

Studies examining SOS in the social media context remain limited, though researchers have found evidence of its relevance. Gearhart and Zhang (2013) found that the willingness to respond to a hypothetical scenario about gay bullying on Facebook was predicted by the willingness to self-censor and congruence with the perceived overall opinion climate e findings aligned with the SOS theory.

However, boundaries between offline and online communication are increasingly blurred. In the contemporary media environment individuals often find themselves crossing back and forth the private and public spheres (Bimber, Flanagin, & Stohl, 2005), suggesting that opinion expressions may emerge from a process of negotiating and communicating in the informational environments rather than the evaluation of a singular informational environment. These points highlight that there is much relevance in understanding how opinion expressions and the SOS theory manifests in online settings.

We consider the features of Facebook to examine the diverse forms of opinion expression that have now emerged in online communication. Other than expressing an opinion via a post, Facebook users can also share the posts of others (with or without their personal commentaries), “like” the post (other affective responses such as ‘sad’, ‘angry’ and so on were only introduced by Facebook after the conclusion of this study), and/or comment on the post. These features have been dubbed “click speech” (p. 393), because opinion expressions happen with simple clicks, and do not require users to produce their own content (Sklan, 2013). As Robbins (2013) suggested, click speech has also changed traditional understanding and concepts of opinion expression. Click speech is especially important, because of the ease and ability for opinions to spread and penetrate different social networks quickly.

Click speech provides different measures and indicators of the opinion climate through the number of “likes” or “shares” that a post receives. These information cues

indicate the amount of attention or popularity that a post is getting, such that individuals may perceive posts with more attention to be the dominant opinion climate, even though it might not necessarily be so (Schulz & Roessler, 2012).

Online actions are increasing in their impacts. In a lawsuit in Virginia in 2009, former employees of a political candidate claimed that they were fired from their jobs because they had supported their employer's political opponent by “liking” the opponent's Facebook page (Felberbaum, 2013). The U.S. federal appeals court concluded in 2013 that clicking “like” constitutes speech and is considered a “substantive statement” (Sklan, 2013, p. 397) and was regarded as action symbolic of expressing full support of the political candidate in real life. The U.S. is not alone in at least attempting to treat click speech on social media as forms of opinion expression. In 2012, the Philippines enacted a legislation that would potentially allow users who “like” defamatory content on Facebook to be charged for online libel. However, following widespread criticisms, the legislation was later suspended (Freedomhouse, n.d.).

However, there are different motivations for “liking” on Facebook (Sklan, 2013). Some users click “like” to get discounts on products, a marketing strategy often used by companies, and others “like” a page just so that they can follow updates. “Likes” do not automatically imply support. Substantive statements can also be generated from the act of sharing on Facebook, in the same way that clicking “like” on a main post does (Robbins, 2013). Therefore, click speech such as liking and sharing posts on Facebook are “symbolic acts,” regarded as forms of speech protected in the U.S. (Robbins, 2013, p. 148).

Regardless of the motivations, intentions to share, like or comment online can be quite different from actual click speech. For instance, Gabbiadini, Mari, and Volpato (2013) showed how the theory of planned behavior accounts for only around three percent of actual commenting behavior in a forum. It is the typical Pareto principle, where only a small proportion contributes to the majority of content generated online, but this may also be

understood by the presence of many other forms of opinion expression in the form of click speech.

It is thus important to consider how click speech impact opinion expressions. However, existing studies on SOS in the online context, such as forums and chat rooms, examined traditional modes of opinion expression (Ho & McLeod, 2008; Ng & Detenber, 2005). Even Gearhart and Zhang's (2013) Facebook study in the SOS context did not leverage on the wider range of opinion expression that social media platforms offer, beyond commenting online or speaking up offline.

This study aims to address the gap by explicating the range of click speech, as well as traditional modes of expressions using the SOS theory. Central to the theory is the assumption that individuals fear being isolated or ostracized from society, especially if their viewpoints are not congruent with the opinion climate (Noelle-Neumann, 1974), making them less likely to speak up. The fear of isolation influences the expressions of opinions when there are opinion differences. Many studies carried out in traditional communication settings found that individuals with higher fear of isolation are less likely to express their viewpoint (Ho, Chen, & Sim, 2012; Scheufele, Shanahan, & Lee, 2001).

As for computer-mediated communication, Ho and McLeod (2008) found that the effect from fear of isolation was significantly attenuated in a computer-mediated communication setting, and suggested that reduced social cues in such settings presented a less intimidating environment for opinion expressions. However, social media sites have evolved with several characteristics that shape (or are shaped by) interactions among people. For example, social networks on Facebook are often based on real-world relationships. The fear of not holding a popular opinion may still be a consideration by users in their participation of online discussions (Metzger, 2009). Studies on online ostracism have also presented evidence pointing to the negative effects felt by individuals that are similar to those

being ostracized in real life (Kassner, Wesselmann, Law, & Williams, 2012), suggesting that the fear of isolation may also be highly relevant in the online context. We posit the following hypothesis:

*H1.* Individuals with lower fear of isolation will indicate greater intention to (a) “like” the main Facebook post, (b) “like” the Facebook comments, (c) share the post, (d) comment on the post online, and (e) comment offline in future conversations than those with higher fear of isolation.

The evaluation of opinion climate is another key tenet of the SOS theory. When the opinion climate is congruent to an individual's existing beliefs or attitudes, there is greater likelihood of expressing one's opinions. Mass media is often seen as the key disseminator of information, in which people tend to use it as the main platform for assessing opinion climate (Jeffres et al., 1999). However, the reliance on mainstream media to shape or represent opinion climate may no longer hold true with the Internet.

Information on the Internet is generated by a much more diverse group of content producers, which includes journalists (and citizen journalists), organizations, and individuals. This drives “individualized information seeking” (Bonfadelli, 2002, p. 73): users must select their desired content for themselves, for example, by switching between pages until they are satisfied with what they have found. This implies that there is much self-selection and selective exposure, information may be selected subjectively and interpretations may be narrow (Schulz & Roessler, 2012).

In addition, filtering and analytical algorithms on social media increasingly limits exposure to diverse information. In Facebook, information appearing on a user's newsfeed is influenced by the composition of his social network, tailored by complex algorithms that consider how much the user has interacted with posts of that nature, the number of “likes,” “shares,” and comments the post has received from the user's friends, whether the user has

hidden similar posts before (Backstrom, 2013).

This leads to the increase of highly subjective perceptions of opinion climates (Schulz & Roessler, 2012, p. 351). While the original SOS theory assumes that there is one uniform opinion climate that affects people, individuals today would probably rely on their own perceived opinion climate. This reduces the overall power of the proposition that the opinion climate can predict people's inclination to express themselves, since it is individualized and unpredictable.

Other studies on SOS highlight that people can actually perceive multiple opinion climates, and an individual will assess the opinion climate at various levels before reacting accordingly (Liu & Fahmy, 2011). In an online setting such as a forum, such levels could be: (a) the within-forum opinion climate (i.e., opinions of forum participants); (b) the general online opinion climate; and (c) the offline opinion climate (Nekmat & Gonzenbach, 2013).

Similar to Schulz and Roessler (2012), Nekmat and Gonzenbach (2013) originally believed that with multiple levels of opinion climate, there might be little consensus among participants of the overall opinion climate, so the SOS theory could do little in predicting opinion expressions. However, they found that intentions to post messages were shaped by participants' opinion congruence with those in the forum: those who perceived themselves to have a minority opinion were less likely to speak up. Their findings affirmed that it is the immediate communication context that is most influential.

Studies on group polarization demonstrating how people tend to gather with people like themselves online (Spears, Lea, & Lee, 1990; Yardi & Boyd, 2010), may help to support the proposition. As Yardi and Boyd (2010) found, even if people are exposed to diverse opinions from other groups, they are limited in the ability to engage meaningfully. In other words, the immediate context is still the more salient opinion climate they relate to.

Therefore, while an overall and uniform opinion congruence espoused in the original

SOS theory is increasingly being broken down by the proliferation of online information, the concept may still matter, except that opinion congruence should now be studied specific to its immediate context. We propose the following hypothesis:

*H2.* Individuals who are exposed to a congruent opinion climate will indicate greater intention to (a) “like” the main Facebook post, (b) “like” the Facebook comments, (c) share the post, (d) comment on the post online, and (e) comment offline in future conversations than those who are exposed to an incongruent opinion climate.

### **3. Online civility**

Although not part of the original SOS theory, online civility is becoming an issue of prominence, especially with it permeating online discussions. Civility is often perceived as the appropriate behavior to exhibit in political communication, the lack of which also drives people away from engaging in political discussions (Johnson & Johnson, 2000; Papacharissi, 2004). Unfortunately, on the Internet, incivil behavior such as flaming is widespread (Papacharissi, 2004), due to anonymity, physical isolation, and the absence of interpersonal cues (Papacharissi, 2002).

The levels of civility in a discussion could have ramifications on people's intentions to participate. For example, Morand (1996) found that polite behaviors in a real-life organization setting are often related to the distribution of formal authority, and superiors that are more polite are perceived as more amicable and less dominant. Similarly, Ng and Detenber (2005) found that in the online contexts of a synchronous chat session and asynchronous discussion forum, incivil discussants were also perceived to be more dominant than civil participants. Such dominance may become a hindrance to opinion expressions and online participation. However, civility was not a significant factor on people's intentions to participate in online discussions (Ng & Detenber, 2005), a finding which may be attributed to the general unfamiliarity and lack of relevance of issues used in the study.

Studies on the effects of online civility remain limited, and one reason could be due to the challenges of defining the concept. In Papacharissi's (2004) analysis of political discussions, she noted that researchers often use impoliteness and incivility interchangeably. Impoliteness, or rudeness, is less harmful than incivility as it is a common phenomenon in debates and occurs spontaneously. Impoliteness “implies emotion, and emotion implies compassion, which in turn implies humanity” (p. 279). On the other hand, expressions of incivility often stem from strongly-held beliefs, are usually not regretted, and often have the consequence of making access to participation in the discussion forum more inequitable and undemocratic. The other challenge of explicating the concept is that perceptions of incivility may be shaped by language, cultural norms and values: what may be regarded as emotive and impolite in one cultural context may actually be perceived as incivility and hate in another cultural context.

According to Papacharissi (2004), incivil statements possess one of the following three characteristics: (a) threatening democracy (for instance, the suggestion to overthrow a democratic government); (b) assigning stereotypes (such as associating someone with a group by calling him or her a “faggot”); and (c) threatening the rights of other individuals (such as the right to free speech).

Singapore has the second highest rate of online bullying after China, according to a 2012 Microsoft survey conducted in 25 countries (Microsoft, n.d.). With English as the medium of instruction and language, the characteristics of incivility are applicable to Singapore's cultural context. We posit the following hypothesis:

*H3.* Compared to individuals exposed to an incivil online environment, those exposed to a civil environment will indicate greater intention to (a) “like” the main Facebook post, (b) like the Facebook comments, (c) share the post, (d) comment on the post online, and (e) comment offline in future conversations.

## 4. Method

### 4.1. Participants and procedure

Participants were undergraduates recruited in February 2014 from a large public university in Singapore ( $N = 502$ ; 217 males and 285 females). Undergraduates were chosen as participants as they are native users of Facebook and many other social media platforms. They are highly educated and at a stage when they encounter political and social issues. Therefore, they are quite likely to be equipped with enough confidence and knowledge to form an opinion. They were aged 21–26 years old, with a median age of 23 years old. An email was sent to different schools inviting participants to a pre-test survey. A total of 1459 participants completed the pre-test. A total of 623 responses yielded after data cleaning and checking for valid responses (surveys with missing values or incoherent responses were excluded). A week after the pre-test, all 623 respondents were emailed a link to the second survey. Of these respondents, 502 gave qualified responses to the second survey (again, those with missing values or incoherent responses were excluded). Both questionnaires were administered using web-based surveys.

In the pre-test survey, participants were informed that the purpose of the study was to investigate relationships on social networks. After a week, they were sent an email with a randomly assigned link, which brought them to a permanent story link on Facebook (i.e., the experimental stimulus). They had to log on to Facebook to see this link. This step ensured that the participants have a Facebook account before they proceeded with the second survey, and also introduce a sense of “realism” in their responses on the hypothetical Facebook experiment. The pre-test survey was used to measure the participants' personal attitudes toward foreign talent and fear of isolation, as well as demographic variables. All participants were given the same first survey. The second survey (post-test) measured participants' intended behavior on Facebook, which includes intentions to “like” the Facebook post, “like”

comments on the Facebook post, comment on the Facebook post, share the Facebook post, as well as commenting offline in conversations. The link on the Facebook page brought participants to the manipulation and the post-test survey, where they had to fill in the participant ID given to them in the e-mail.

#### **4.2. *Experimental design***

The issue of Singapore's foreign talent policy was selected as the context for the study. As the issue is complex (e.g., a respondent may be supportive of the foreign talent policy on one facet of economic competitiveness, but against it on another facet of taxes and infrastructure), we considered the relevance of the issue for the potential participants (undergraduates who will have to compete with foreign talent for jobs upon graduation) and chose to frame the issue in the context of foreign talent and the availability of jobs.

**Pre-test.** The pre-test measured the respondents' initial attitudes toward foreign talents and immigrants. Content analysis was conducted on a sample of posts from online forums, blogs, and news on the issue of foreign talents and immigrants and analysed for general themes. Six themes emerged: valuable skillsets, favoritism, unfair competition, contribution to economic competitiveness, unfair wages, and working attitudes. Participants were asked to indicate their agreement on a scale of 1–10 on the following statements:

1. Foreign talents provide more valuable work-related skills than Singaporeans.
2. Foreign talents are more likely to unfairly hire other foreign talents.
3. Foreign talents deprive Singaporeans of jobs.
4. Foreign talents help to keep the Singapore economy competitive.
5. Foreign talents unfairly earn more than Singaporeans.
6. Foreign talents have better working attitudes than Singaporeans.

The pre-test also surveyed participants on their fear of isolation as well as their demographics. To prevent desensitizing the respondents toward the topic, they were given a

one-week break before being informed of the second survey.

**Manipulations.** A screenshot was created to control for independent variables of opinion climate and civility (see Fig. 1). The story in this post is associated with an issue that continues to be hotly debated to this day at the point of writing about the influx of foreigners in the workforce, which has often invited polarized opinions. While the post itself is authentic e captured from a report posted by a local mainstream newspaper, the civility of the comments was altered following Papacharissi's (2004) definitions of incivility, such as assigning stereotypes and threatening the rights of others to expression. Other aspects were kept constant, such as the type of post, content of comments, names of commenters (all English names with Chinese surnames to prevent perceptions ethnicity from confounding perceptions of the comments), profile display photographs (gender neutral photos to prevent gender from confounding), and number of likes on the main post. The number of characters for comments was also similar.

**Post-test.** The study used a 2 (opinion climate: low vs. high opinion congruency) x 2 (civility: incivil vs. civil) between-subjects design. After the respective manipulations, participants were asked questions to evaluate how they would respond to the manipulation. Finally, they rated how realistic the comments were.

#### **4.3. Measures**

Cronbach alpha is used as a measure of internal consistency for each measure containing more than one item. Bland and Altman (1997) argued that values of Cronbach alphas ranging from 0.70 to 0.90 are high.

**Attitudes toward foreign talent.** A 10-point Likert scale (where 1 is strongly disagree and 10 is strongly agree) was used to evaluate attitudes toward foreign talents. Six items on the scale were designed based on observations of the common comments in which Singaporeans have against foreigners on blogs and social media on the issue of jobs. Example

items include “Foreign talents are more likely to hire other foreign talents” and “Foreign talents deprive Singaporeans of jobs.” Higher scores indicate that the participant is more supportive of foreign talents ( $M = 5.09$ ,  $SD = 0.77$ , *Cronbach's*  $\alpha = 0.57$ ). To check the validity of the attitude toward the foreign talent scale, it was compared to the Xenophobia Attitude Scale (*Cronbach's*  $\alpha = 0.76$ ) (van der Veer et al., 2013), and there was a significant correlation,  $r(500) = 0.53$ ,  $p < 0.01$  between the two scales.

**Fear of isolation.** To evaluate fear of isolation, a 7-point Likert scale (from 1 strongly disagree to 7 strongly agree) with 11 items adapted from previous studies was used (Hayes, Matthes, & Eveland, 2011; Ho & McLeod, 2008). Example items include “It is scary to think about not being invited to social gatherings by people I know” and “I enjoy getting into arguments.” The items were summed up in which higher scores indicate higher fear of isolation ( $M = 4.44$ ,  $SD = 0.66$ , *Cronbach's*  $\alpha = 0.81$ ). A median split based on the computed score was done to separate participants' level of fear of isolation into two levels: high fear of isolation and low fear of isolation.

**Intention to like main post or individual comments.** To measure intention of the participant to like the main post or the individual comments, a 6-point Likert scale (from 1 highly unlikely to 6 highly likely) was used with the questions “How likely are you to click ‘like’ on the MAIN Facebook post?” ( $M = 2.31$ ,  $SD = 1.45$ ) and “How likely are you to click ‘like’ on the individual comments?” which had the commenter's name attached to each scale ( $M = 6.99$ ,  $SD = 4.57$ , *Cronbach's*  $\alpha = 0.91$ ).

**Intention to comment on story on Facebook.** To measure intention of the participant to comment on the original posting by the news outlet, a 6-point Likert scale (from 1 highly unlikely to 6 highly likely) was used with the question “How likely are you to comment on the post?” ( $M = 1.43$ ,  $SD = 0.80$ ).

**Intention to share story on Facebook.** To measure intention of the participant to

share the story on their own wall, a 6-point Likert scale (from 1 highly unlikely to 6 highly likely) was used with the question “How likely are you to share the post on your own wall?” ( $M = 1.67, SD = 1.03$ ).

**Intention to comment offline in conversations.** The likelihood of the participant to comment offline with friends after the experiment was measured with responses to the following question based on a 6-point Likert scale (from 1 highly unlikely to 6 highly likely): “If you chanced upon the above Facebook screenshot, how likely are you to later speak out about Singapore's foreign talent policy in OFFLINE conversations?” ( $M = 3.65, SD = 1.39$ ).

#### **4.4. Manipulation checks**

There was a significant difference in the participants' opinion toward the stimulus' stance toward foreign talent, [ $t(500) = 18.7, p < 0.01$ ]. Those in the climate that was supportive of foreign talent ( $M = 3.39, SD = 1.02$ ) rate the stimulus to be more positive toward foreign talent than those who were in the climate that was against foreign talent ( $M = 1.88, SD = 0.79$ ). There was a significant difference in participants' opinion toward the civility of the stimulus,  $t(500) = 12.7, p < 0.01$ . Those who were in the civil climate ( $M = 3.02, SD = 0.92$ ) rated the stimulus to be more civil than those who were in the incivil climate ( $M = 2.03, SD = 2.03$ ). Results were significant for the support of foreign talent policy and civility, suggesting successful experimental manipulation.

## **5. Results**

### **5.1. Liking of main post**

A mixed-design ANOVA with Fear of Isolation (high, low) as within-subjects factor and Opinion Congruence (congruent, incongruent) and Civility (civil, incivil) as between-subjects factors revealed that there were no main effects of civility and congruence. Hence, H1a, H2a and H3a were not supported. However, there was a significant three-way interaction effect from all of the factors on the dependent variable, likelihood of liking main

post,  $F(1,494) = 6.65, p = 0.01, \eta^2_p = 0.013$ . A post-hoc analysis using Fisher's LSD test was conducted. Figs. 2 and 3 illustrate the results.

In a congruent and incivil environment, participants with a relatively low fear of isolation ( $M = 2.75, SD = 0.18$ ) were more likely to like the main post compared to those with high fear of isolation ( $M = 1.80, SD = 0.18$ ),  $F(1,494) = 13.68, p < 0.01$ . For participants with low fear of isolation and were in the incivil environment, those exposed to congruent views ( $M = 2.75, SD = 0.18$ ) were more likely to like the main post than those who were exposed to incongruent views ( $M = 2.21, SD = 0.19$ ),  $F(1,494) = 4.16, p < 0.05$ .

For participants with low fear of isolation and exposed to congruent views, those who were in the incivil environment ( $M = 2.75, SD = 0.18$ ) were more likely to like the main post than those in the civil environment ( $M = 2.19, SD = 0.17$ ),  $F(1,494) = 5.18, p < 0.05$ .

Participants with high fear of isolation and were exposed to the incivil environment and incongruent climate ( $M = 2.42, SD = 0.19$ ) were more likely to like the main post than those who were exposed to congruent views ( $M = 1.80, SD = 0.18$ ),  $F(1,494) = 5.42, p < 0.05$ . However, those who were exposed to congruent views and were in the civil environment ( $M = 2.37, SD = 0.18$ ) were more likely to like the main post than those who were in the incivil environment ( $M = 1.80, SD = 0.18$ ),  $F(1,494) = 4.77, p < 0.05$ . For those with high fear of isolation, the congruency of opinion climates did not matter in liking the main post, so long as the environment was civil. However, if the environment was incivil, participants were less likely to like the main post if the opinion climate was congruent.

## **5.2. Liking of comments**

A mixed-design ANOVA with Fear of Isolation (high, low) as within-subjects factor and Opinion Congruence (congruent, incongruent) and Civility (civil, incivil) as between-subjects factors revealed a main effect from Civility on the likelihood of liking individual comments [ $F(1, 494) = 7.53, p = 0.00, \eta^2_p = 0.015$ ]. Participants who were in the civil

environment ( $M = 1.88, SD = 0.07$ ) were more likely to like individual comments than those who were in the incivil environment ( $M = 1.60, SD = 0.07$ ). As hypothesized, compared to individuals exposed to an incivil online environment, those exposed to a civil environment were more likely to like Facebook comments (Fig. 4). Thus, H3b was supported. There were no significant results on the effects of fear of isolation or opinion congruence, and H1b and H2b were not supported.

### **5.3. Sharing behavior**

There were no significant results between the independent variables and sharing behavior. H1c, H2c and H3c were not supported.

### **5.4. Commenting online**

A mixed-design ANOVA with fear of isolation (high, low) as within-subjects factor and opinion congruence (congruent, incongruent) and civility (civil, incivil) as between-subjects factors revealed a main effect from the fear of isolation on the likelihood of commenting [ $F(1, 494) = 3.84, p < 0.05, \eta^2_p = 0.008$ ]. Participants who had a low fear of isolation ( $M = 1.50, SD = 0.05$ ) were more likely to comment compared to those who had high fear of isolation ( $M = 1.36, SD = 0.05$ ). Thus, H1d which predicted that participants with low fear of isolation would be more likely comment online on the post was supported. H2d and H3d were not supported.

There was an interaction effect of opinion congruence and fear of isolation [ $F(1,494) = 5.89, p < 0.05, \eta^2_p = 0.012$ ], as illustrated in Fig. 5. For participants exposed to congruent views, those with low fear of isolation were more likely to comment ( $M = 1.57, SD = 0.07$ ) than those have high fear of isolation ( $M = 1.26, SD = 0.07$ ), [ $F(1,494) = 9.98, p < 0.01$ ]. Table 1 provides a summary of the results.

### **5.5. Opinion expressions “offline”**

There were no significant results reported in commenting offline in future

conversations. Hence, H1e, H2e and H3e were not supported.

## **6. Discussion**

The evolving nature of social media with its diminished nonverbal cues (Walther, Loh, & Granka, 2005), click speech (Sklan, 2013), and online civility (Papacharissi, 2004) provides an opportunity to determine the extent to which the SOS theory may be manifested. Commenting on Facebook posts is a form of opinion expression. Given that people who may see an individual's comment on Facebook could potentially be friends of his or her friends, or even strangers, the situation is similar to the classic train scenario by Noelle-Neumann (1974). Results from this study found that participants with a low fear of isolation were more likely to comment on the Facebook post than participants with a high fear of isolation (thus supporting hypothesis H1d) — showing that the SOS theory is still applicable to online communication settings. Consistent with the SOS theory, we found that participants with a low fear of isolation were more likely to comment on the Facebook post in a congruent climate than in an incongruent climate. The result is consistent with the extant literature, which argues that the fear of not holding a popular viewpoint is still a likely consideration before expressing themselves in online discussions (Metzger, 2009).

The unique feature of “liking” in Facebook can facilitate opinion expressions and connect people with like-minded others (van Dijck, 2013). Our study revealed this happens under certain conditions: in a congruent opinion climate, participants with a low fear of isolation were more likely to “like” the Facebook post when the environment was incivil than civil. Participants with a high fear of isolation were more likely to “like” the Facebook post when the environment was civil than incivil. Participants with a high fear of isolation were more likely to “like” the Facebook post when the opinion climate was incongruent than congruent with their own opinion.

These findings imply that for participants with a low fear of isolation, a congruent but

incivil environment could strengthen their original opinions or motivate them to express their opinions more so than in a congruent but civil environment by “liking” the Facebook post. This is similar to results from an earlier study by Anderson, Brossard, Scheufele, Xenos, and Ladwig (2014), which found that incivil discussion induced polarization of individuals' risk perception of a neutral topic. For participants with a high fear of isolation, an incongruent and incivil environment could amplify the effects of the SOS theory, causing them to conceal their original opinions even more than so in an incongruent but civil environment. Likewise, an incongruent and incivil environment could encourage participants with a high fear of isolation to express opinions.

Findings in this study allude to the fact that there may be multiple layers of opinion climates. The immediate opinion climate had the greatest significance, with participants directly impacted by it. Other levels of opinion climates may have had mitigating effects on participants in our study, and future research could determine the extent of such effects.

Results from this study also found that participants were more likely to “like” individual comments on the Facebook post in a civil than incivil environment (thus supporting hypothesis H3b). There was no significant difference in participants with different levels of fear of isolation and from different opinion climates. This could mean that regardless of the levels of fear of isolation and opinion congruence, participants generally prefer a civil to incivil environment for opinion expression. This result reinforces current research, which finds that civility is often perceived as appropriate behavior for political communication, and that the lack of civility drives people away from engaging in political discussions (Johnson & Johnson, 2000; Papacharissi, 2004). Incivil discussants have also been perceived as more dominant than their civil counterparts, and such dominance may discourage responses to incivil comments (Ng & Detenber, 2005).

However, fear of isolation and opinion congruence had no significant effect on liking

individual comments on Facebook posts. This could be attributed to limitations of experimental methods. Previous research has indicated that one of the most important reasons why users “like” posts or comments is to endorse or promote the post, serving a social enhancement value (Huang, 2013). The short posts created for this study, and the fact that the commenters and post are not from the actual social networks of participants, may not have been sufficient to communicate these values to participants.

Our findings show that liking the main post is different from liking comments. The fear of isolation and opinion congruence did not have significant effects for liking comments. Liking the Facebook post could indicate support for the contents of the post, i.e., the news story but not the contents of the comments. Hence, participants who liked the Facebook post could have judged it on its own merits as a news story, rather than evaluating it as a unit that is also inclusive of the comments. Liking the Facebook post may also depend on other factors such as personal relevance: users who like a post may be doing so in the hope that the issue may be given greater prominence as their own egocentric public. The psychology behind liking Facebook posts versus liking comments is an area for future research.

Unlike liking, we did not find sharing of the Facebook post to be affected in ways similar to conventional opinion expression. This could mean that among the various forms of communication on Facebook — such as commenting on, liking, and sharing of a Facebook post — sharing presents the highest barrier of communication. This may be attributed to the mechanisms of Facebook communication. Commenting on or liking a Facebook post automatically generates a notification on the right sidebar on Facebook for an individual's Facebook friends. Sharing, on the other hand, requires additional steps of posting on one's Facebook page and/or writing a comment on the post e a more significant effort in other words. Future research may wish to look into participants' perceived differences of and personal preferences among the various forms of communication on Facebook.

## 7. Conclusion

Although the study had an equal mix of participants in the opinion congruent and incongruent setting, the number of participants with anti-foreign talent views was much higher than participants with pro-foreign talent views. While this may reflect the general public opinion on the issue of foreign talent, it also shows that this survey had a significantly higher number of participants who had anti-foreign talent views, which may have influenced our findings. Future studies could try to ensure that there is an equal mix of participants with differing views before randomly assigning them to manipulated scenarios.

The SOS theory has been seen to apply offline, online in forums and to some extent, through this experiment, to be present in Facebook as a social networking site. However, this study had found that not all aspects of the SOS theory have direct impacts in the communication settings of Facebook. Given the evolving social media environment, future studies should revisit how different characteristics of the medium could impact SOS theory in terms of shaping opinion expression on social media.

There are some implications about Facebook as a social networking site which is now emerging as a dominant social media platform (Skoric, Zhu, Goh, & Pang, 2015). They meet informational needs, but also function as platforms for people to build and/or sustain relationships, and express themselves online. More work is needed in understanding the role and meaning of click speech especially in the domain of expressive use of social media.

The study reported in this paper contributes to the ongoing gap and development of click speech as a form of opinion expression, and the conditions that could shape them. Not all click speech is the same, as we found different effects for liking as well as commenting. Sharing a post surfaces as a distinct form of click speech; and future work should go on to deepen understanding on the media psychology aspects of such click speech.

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## Tables and Figures

**Table 1.**

ANOVA summary for likelihood of commenting by opinion congruence, civility and fear of isolation.

Source	SS	df	MS	<i>F</i>
Opinion congruence (OC)	0.079	1	0.079	0.125
Civility (CV)	1.167	1	1.167	1.854
Fear of isolation (FOI)	2.418	1	2.418	3.841*
OC × CV	0.004	1	0.004	0.006
OC × FOI	3.703	1	3.703	5.884**
CV × FOI	0.234	1	0.234	0.372
OC × CV × FOI	0.374	1	0.374	0.594
Error	310.89	494	0.629	

Notes: \*  $p = 0.05$ . \*\*  $p < 0.005$ .

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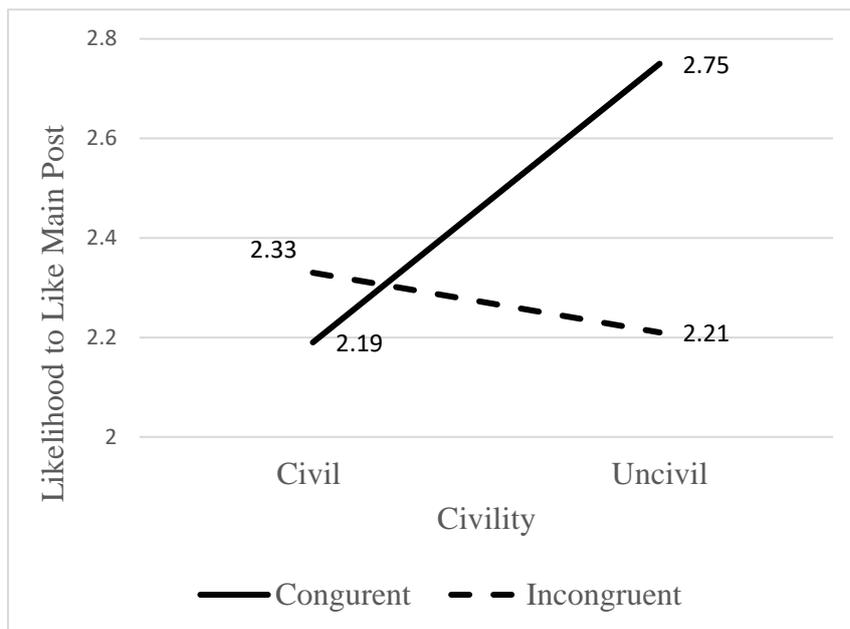
**Harley Wong** So many Singaporeans complain that FTs are taking away their jobs. But are their working attitudes as good as that of FTs? These loser Singaporeans probably are just lazy pigs with zero drive.  
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**Kendall Chua** FTs usually occupy good jobs, but this does not mean there are no opportunities left for Singaporeans. Our universities are damn good, and many graduates still get bloody well-paid upon graduation.  
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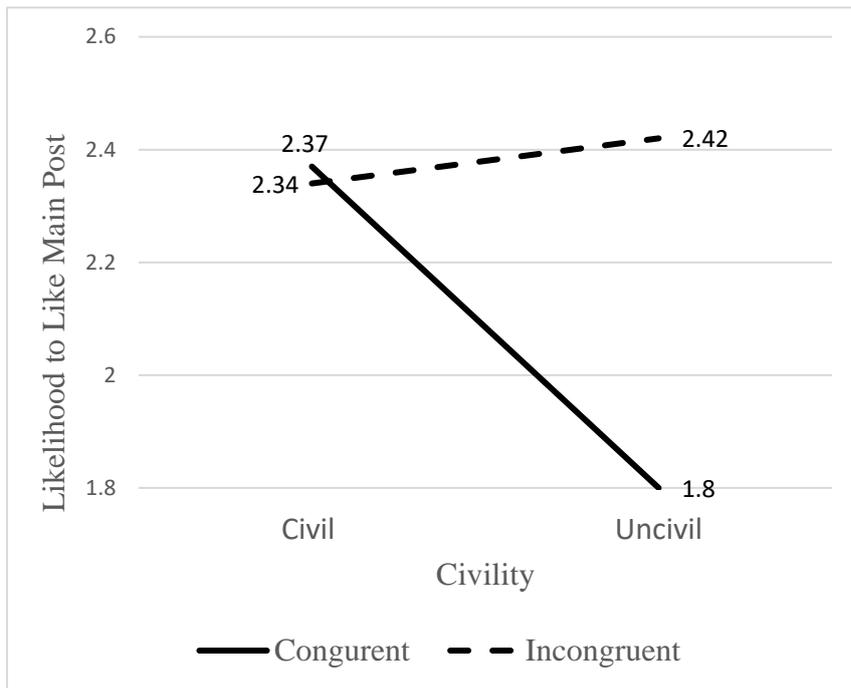
**Taylor Lee** It is fair if FTs get paid more than locals, because they significantly make our economy competitive. Those who disagree have no economic knowledge, and should just shut up and leave this page.  
Like · Reply · 4 hours ago

**Cameron Low** Sometimes FTs hire other FTs with special expertise that Singaporeans lack, but they are just as eager to hire skilled locals. Conversely, the locals are xenophobic idiots who avoid working with FTs.  
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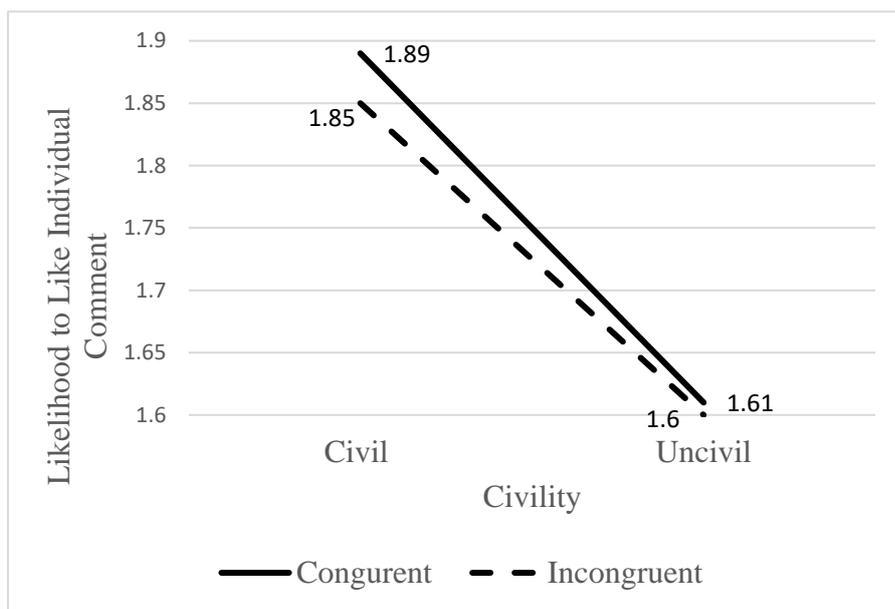
**Figure 1.** Pro-foreign talent and incivil comments manipulation.



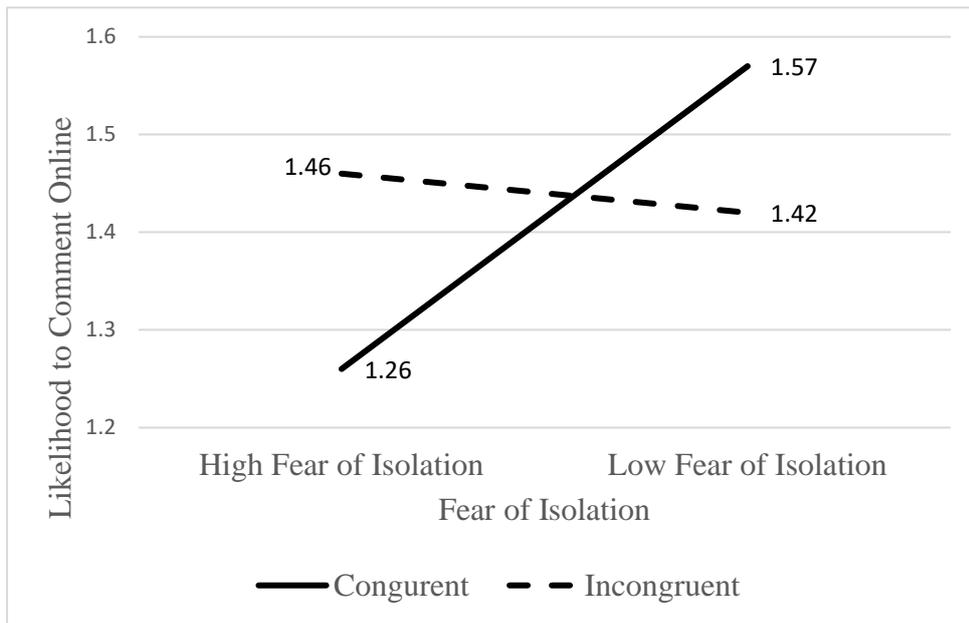
**Figure 2.** Interaction between opinion congruency (OC) and civility (CV) on liking main post for those with low fear of isolation (FOI).



**Figure 3.** Interaction between opinion congruency (OC) and civility (CV) on liking main post for those with high fear of isolation (FOI).



**Figure 4.** Interaction between opinion congruency (OC) and civility (CV) on liking comments.



**Figure 5.** Interaction between opinion congruency (OC) and fear of isolation (FOI) on likelihood to comment online.