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The Political Consequences of Online Disagreement: The Filtering of Communication Networks in a Polarized Political Context

Xinzhi Zhang1, Wan-Ying Lin2, and William H. Dutton3,4

Abstract
The present study challenges prevailing beliefs and research on the role of social media in supporting deliberation and an active public sphere. Based on a two-wave online panel survey (n = 791) of the adult population of Hong Kong, as one case of a politically polarized society, we examine the degree to which individuals disconnect from those with whom they politically disagree with on social media. The analysis indicates that exposure to disagreement does indeed lead people to filter their information repertoire by disconnecting from those with whom they disagree. A moderated mediation analysis finds that political disagreement indirectly influenced activist participation through information repertoire filtration. However, in contrast to expectations, this effect was stronger when individuals had a lower level of affective polarization. Our findings underscore the value of focusing on the behavior of users to complement research on access to information about politics.

Keywords
political disagreement, affective polarization, information repertoire filtration, political participation

Prior research on social media supported optimistic forecasts of its civic and political roles. Theoretical perspectives, such as the logic of connective action (Bennett & Segerberg, 2012), argued that content shared by users on social media facilitates social movements beyond those organized by established interest groups and political parties. When media enables people to self-select their online connections, counter-arguments lament the divisions among people that social media can cause. When exposed to political disagreement online, people can actively resort to several disconnecting actions and curate their political information repertoire—the online information sources and friendship they regularly rely on to obtain information and viewpoints about politics—in the forms of unfriending, unsubscribing, muting, and blocking other users (Bode, 2016; Fletcher & Nielsen, 2018; John & Dvir-Gvirsman, 2015; Yang et al., 2017).

Prior studies have focused on the more democratic elements of collective outcomes rather than these (non)communicative practices, which may counter assumptions of democratic engagement but be critical to the dynamics of online political communication. On the one hand, people can actively filter their information repertoire as a response to disagreement. When exposure to disagreement discourages political participation (Lu et al., 2016; Mutz, 2002), avoiding disagreement may help people continue to be engaged and informed (Dubois & Szwarc, 2018). On the other hand, information repertoire filtration as a means of communication breakdown may undermine constructive deliberation by creating a more politically homogeneous sphere (McPherson et al., 2001). Although people more easily interact with those who are like-minded, such homophily-driven interaction jeopardizes opportunities to obtain information and arguments from a more diverse array of political standpoints, tilting patterns of communication toward reinforcing echo chambers and more polarized publics (Sunstein, 2009).

To resolve these countervailing viewpoints, the present study focuses on how people respond to social-mediated political disagreements. It extends research on the political
consequences of affective polarization, defined as the extent to which individuals demonstrate animosity against political camps as opposed to their own (Iyengar et al., 2019). While several studies addressed the antecedents of polarization or its consequences on non-political issues, “little has been written on [the political consequences of affective polarization]” (Iyengar et al., 2019, p. 139). The present study aims to reveal how polarization plays a role in people’s acquisition and processing of social media-mediated political information, shaping how they engage in politics in a polarized context.

This study focuses on Hong Kong, where rounds of political upheaval over the past two decades have intensified between opposing political camps. A report showed that Hong Kong is among the most polarized polity in Asia and the developed world (Boese, 2022). A two-wave online survey was conducted in mid-2020. The findings enable reflections on the extent to which digital information and communication technologies may contribute to a civic culture in a polarized society and potentially nurture an active but also open and inclusive public.

**Political Disagreement and (Dis)connection**

**Political Disagreement and Information Repertoires on Social Media**

Political disagreement may lead to reflection on one’s beliefs and promote tolerance by exchanging ideas with individuals who have different political orientations (Heatherly et al., 2017). However, Weeks et al. (2017) found that encountering political disagreement resulted in political polarization because people tended to reinforce their political identity and only pursue like-minded content.

While social media allow people to seek information and socialize with each other, the platform also enables them to curate their interpersonal relationships and information sources. The present study applies the concept of information repertoire, which is defined as a combination of information sources and social connections people regularly rely on to learn about politics (Fletcher & Nielsen, 2018; Wollfsfeld et al., 2016). In the high-choice social media environment, the information repertoire is a subset of personalized information sources and social connections that people actively select and manage (Strömbäck et al., 2018). Information repertoire filtration includes practices such as cutting off existing social relationships on social media. This could involve unfriending, blocking, and untagging photos, as well as stopping the receipt of information from disconnected sources, such as unsubscribing a news forum or opting out of virtual communities (John & Dvir-Gvirsman, 2012; Knobloch-Westerwick & Meng, 2011). Information repertoire filtration is a means of dissonance reduction behavior for selecting and curating the content.

Political disagreement has been found as a major reason for information repertoire filtration. While Dutton et al. (2019, p. 240) found that only about a fifth (20%) of Internet users in the United States and six of the largest nations in the European Union reported that they ever unfriended or blocked people from their networks, this proportionality could be influential, and this activity could be more prominent in more polarized political contexts. John and Dvir-Gvirsman (2015) discovered that 16% of Jewish Israeli Facebook users engaged in politically motivated unfriending or unfollowing in one period of time, during the Israel–Gaza armed conflict in 2014. An online survey found that during the late 2014 Umbrella Movement in Hong Kong, nearly one-third of the participants unfriended others (Lee & Chan, 2016). From this, we develop the first hypothesis:

**H1.** Exposure to political disagreement is positively related to filtering one’s information repertoire on social media.

**The Political Consequences of Information Repertoire Filtration**

What political consequences flow from these repertoire filtering strategies? We focus on political participation, which refers to various means that people use to express their desires, interests, and demands to political elites or authorities (Verba et al., 1971). While there are numerous ways of participating in politics, we examine the forms most closely associated with political disagreement by distinguishing two types of political participation based on the “conflict dimension” (Verba et al., 1971, p. 14), which are the extent to which individuals may be opposed by counter-participants and the disagreement that may occur during the participation process. This dimension focuses on the relationships between the participants, and it is feasible to examine the extent to which political disagreement would facilitate or mitigate the nature or levels of participation.

Several prior studies have differentiated political participation based on the conflict dimension. For example, Lee (2012) differentiated position-taking participation (which requires the participants to support an issue stance, such as signing petitions, boycotting, and protesting) from non-position-taking participation (which does not require the participants to have a fixed stance and the participants have opportunities to share complex or even ambivalent thoughts.
and feelings). These dimensions address issues over the extent to which the participation process involves disagreement among the participants. Hong and Rojas (2016) extended Lee (2012) and classified episodic participation, which refers to single instances of action and different viewpoints during the participation “makes the decision more complex” (p. 1748), from iterative participation, where understanding different points of views and collaboration are crucial, and participants are joining “an extended dialogue over an issue that the person cares about” (p. 1748).

We follow related studies and term the actions “activist participation” if the participants need to reach a decision with a fixed political standpoint, such as joining a rally or demonstration, signing a petition, or boycotting a business for political reasons, whether “legal or illegal...[or] individual or collective” (Gil de Zúñiga et al., 2021, p. 203). We term those political actions as “deliberative participation” when a mutual understanding of different political views among participants is important to achieve the desired political goals, and opinion diversity contributes to the continuance of these activities, such as volunteering, contributing to a community project, contacting media to share political views, or attending meetings of a community group.

For activism participation, Dvir-Gvirsman et al. (2018) found that exposure to a like-minded discussion reinforced people’s existing political attitudes and increased the tendency to express opinions publicly. If multiple political views are involved, “the information gained from differing points of view can make the decision more complex” (Hong & Rojas, 2016, p. 1748). However, this is not the case in deliberative participation, where different opinions shared among the participants are crucial for the political action to be sustained.

It is noteworthy that distinguishing two types of participation does not mean that they are mutually exclusive or that there is a clear dichotomy between those two. The activism participation may also involve deliberation during the organization process, whereas deliberative participation in the current definition may only consist of people with a similar political stance (one can express strong one-sided views when contacting the media or politicians). Instead, the conceptual framework—focusing on how individuals may be opposed by counter-participants and how much disagreement may occur during the participation process (Verba et al., 1971)—positions different participation actions on a spectrum. Distinguishing two types of political actions—rather than combining all the participation in one single construct—is not only conceptually necessary but also empirically meaningful, as indicated by the present research.

Information repertoire filtration has different impacts on these two types of political participation. Disagreement-triggered information repertoire filtration heightens the activist forms of political participation because the filtration creates a “clean environment where there are no or fewer counter-attitudinal voices” (John & Dvir-Gvirsman, 2015, p. 956). A network with people holding similar political views is crucial for activism as this type of political action normally involves more resources and has the risk of being suppressed by ruling authorities.

Alternatively, information repertoire filtration may dampen deliberative participation. Contradictory and opposite information discussed in heterogeneous networks prompts political learning and information searching (Nir, 2011; Scheufele et al., 2004), and previous studies suggest that a heterogeneous network is positively related to deliberative political participation, such as contacting public officials and volunteering or attending a public forum (McLeod et al., 1999). Building and maintaining relationships with heterogeneous others enables people to receive different types of mobilizing information and news about civic and political events, which increases opportunities to engage in civic activities (Y. Kim & Chen, 2015). Removing contacts with disagreeing political views might diminish these opportunities. Based on the above review, we propose the following:

**H2.** Information repertoire filtration is (H2a) positively associated with activist participation, but (H2b) negatively associated with deliberative participation.

The above discussion suggests a direct effect of political disagreement on information repertoire filtration and a direct effect of information repertoire filtration on political participation, but it also implies an indirect effect of political disagreement on political participation through information repertoire filtration. That is, political disagreement triggers politically motivated information repertoire filtration, and such a curated information repertoire leads to different types of political behaviors. There is a set of studies that discusses the political consequences of political disagreement through their connecting or disconnecting behaviors on social media. Some scholars believe discussions with those having opposing opinions will benefit deliberative democracy as these discussions are facilitated through reflection, making people more tolerant by exchanging ideas with those who have different political orientations (Heatherly et al., 2017). Other scholars believe that political disagreement may cause social pressure and ambivalence, making people avoid potential conflict and refrain from participating in political actions (Huckfeldt et al., 2004; Mutz, 2002). Weeks and colleagues (2017) found that exposure to political disagreement caused a higher level of polarization, driving people “to seek even more like-minded content, thus diminishing the benefits of attitude-challenging information.” Hence, we propose the following:

**H3.** Political disagreement is (H3a) positively associated with activist participation through information repertoire filtration, but (H3b) negatively associated with deliberative participation through information repertoire filtration.
**The Role of Affective Polarization**

Affective polarization refers to the existence of animosity between those involved in different political camps (Iyengar et al., 2012, 2019). While the political consequences of affective polarization have been under-researched (Iyengar et al., 2019), several related works shed light on this topic. Exposure to political disagreement can trigger an identity threat (Powers et al., 2019). In this case, an identity threat would be more salient for those who have a higher level of affective polarization, and they may change their communication behaviors in response to political disagreement. This indicates that people with different levels of affective polarization are likely to respond to political disagreement differently. As social media provides people control over their interpersonal communication networks, information sources, and content to which they want to access (Messing & Westwood, 2014), users might curate their social media to reduce such threats.

John and Gal (2018) interviewed Jewish Israeli Facebook users who had unfriending experiences during the Israel–Gaza conflict of 2014 and proposed the concept of a personal public sphere. This concept is related to Papacharissi’s (2002) concept of online private space, which refers to online social connections that are self-defined in a communicative space of political discussion. When affective polarization is high, people are expected to be more sensitive to the outgroup members with whom they differ in their political viewpoints and therefore be more likely to create an online private sphere via information repertoire filtration. We therefore hypothesize that polarization heightens the relationship between encountering political disagreement and information repertoire filtration:

**H4.** The relationship between political disagreement and information repertoire filtration as stipulated in H1 is stronger when the level of affective polarization is higher.

Meanwhile, affective polarization would also be likely to moderate the linkage between filtering one’s information repertoire and political engagement. Ward and Tavits (2019) found that people with high affective polarization viewed politics through a lens of between-group conflict, thereby being more politically active in advancing the interests of the group they support. When a person’s dislike of the opposing party encourages more political participation (Iyengar & Krupenkin, 2018), it is likely that the higher one’s affective polarization, the more likely a politically homogeneous social network (created from the information repertoire filtration) will support and maintain their political actions, especially for risky and resource-demanding actions in active participation. On the contrary, in cases of people with a lower level of affective polarization, active participation may not be as supported given only one-side matters in the participation. In contrast, in the case of deliberative participation, it is more likely when people are less polarized within a self-defined social connection. We therefore propose that the relationship between information repertoire filtration and participation will be conditioned by affective polarization:

**H5a.** The relationship between information repertoire filtration and activism participation stipulated in H2a is stronger when the level of affective polarization is higher.

**H5b.** The relationship between information repertoire filtration and deliberative participation stipulated in H2b is stronger when the level of affective polarization is lower.

Finally, on the basis of these logics, we explore the conditional indirect effect of political disagreement on participation through information repertoire filtration. Specifically, how does the disagreement → information repertoire filtration → participation mechanism differ at different levels of affective polarization. We ask the following:

**RQ1.** To what extent does affective polarization moderate the indirect effects stipulated in H3a and H3b?

Figure 1 presents the hypothesized relationships among the variables.

**The Research Context**

This study focuses on Hong Kong, a city in which high social media penetration rate and political upheaval are prominent features of its political landscape (Chiu & Lui, 2000). The tension between Hong Kong and mainland China intensified after the 1997 hand-over of sovereignty, resulting in a division between the pro-democracy (supporting increased democracy) and the pro-establishment (supporting ties with mainland China) political camps (Chen, 2018). Large-scale demonstrations and elite-challenging political engagement have become regular features (Lee & Chan, 2016). The unprecedented, large-scale social movements lasting from June 2019 to the end of that year further accelerated the political conflicts between different political camps (Lee et al., 2019). The online political environment in Hong Kong is highly polarized with an ideologically divided community and a frequent lack of civility in attacks on political opponents (Liang & Zhang, 2021). Using social media for information and expression not only facilitates political engagement (Zhang & Lin, 2018) but also triggers selective avoidance and avoidance is related to more protests wherein only one-sided political views prevail (Zhu et al., 2017).

**Method**

**Sample**

The data were drawn from a two-wave online panel survey based on a stratified sample implemented in Hong Kong.
from 8 July to 22 July 2020 (Wave 1) and from 8 September to 22 September 2020 (Wave 2). Participants were local Hong Kong citizens aged between 18 and 65 years, recruited by Dynata, an online survey firm. Respondents were drawn using a stratified quota sampling method where the distribution of several key demographic variables (gender, age, income, and educational level) was set to match the Hong Kong Census data as closely as possible. The first wave consisted of 1,208 valid responses and the second wave had 791 valid responses, a level of attrition similar to other panel surveys. Table A1 in Supplemental Appendix shows the respondents’ profiles and the descriptive statistics of all variables.

Measurements

Dependent variables: political participation. The activist form of participation was measured by asking to what extent the respondent had participated in the following political activities: (1) joined an offline political activity; (2) worn politics-related T-shirts and badges; (3) signed a petition; (4) donated to a society or political activity, or helped them raise money; (5) boycotted the products endorsed by a specific celebrity, or the products/service provided by a specific company or country for political, ethical, or environmental reasons; (6) supported some products for political, ethical, or environmental reasons; and (7) distributed information or advertisements to support a political or social interest group. Each item was measured on a 5-point scale (ranging from 1 = never, to 5 = always). The items were averaged to create a new item measuring an “activist form of participation” (Wave 1: Cronbach’s $\alpha = .94$; $M = 2.02$, $SD = 0.98$; Wave 2: Cronbach’s $\alpha = .93$; $M = 2.11$, $SD = 1.02$). The items for deliberative participation were asked in the same way (ranging from 1 = never to 5 = always), including: (8) contacted the media to express opinions; (9) sought politicians or representatives to express opinions; (10) contacted familiar politicians to intercede for your political appeal by informal means; (11) attended a meeting of a town or city government related to political or social concerns; (12) invited others to attend meetings on political or social concerns. These items were averaged to create a new variable on the “deliberative form of participation” (Wave 1: Cronbach’s $\alpha = .95$; $M = 1.79$, $SD = 0.98$; Wave 2: Cronbach’s $\alpha = .92$; $M = 1.86$, $SD = 1.02$).

To examine the robustness of these two factors, we also performed confirmatory factor analysis (CFA) with the lavaan package in R. We first loaded all the items on a single latent variable (Models 1 and 3) and then loaded the proposed items on two latent variables (Models 2 and 4). Figures 2 and 3 report the factor loadings of the participation items (the manifested variables) on both types of political participation (the latent variables). The factor loadings of each of the latent variables indicate that these items can be classified into the same latent variable.
Figure 2. The single-factor CFA model (Model 1, the upper panel) and the two-factor CFA model (Model 2, the lower panel) of political participation (Wave 1). All coefficients are unstandardized estimates significant at the $p < .05$ level.

Note. CFA = confirmatory factor analysis.
Figure 3. The single-factor CFA model (Model 3, the upper panel) and the two-factor CFA model (Model 4, the lower panel) of political participation (Wave 2). All coefficients are unstandardized estimates significant at the $p < .05$ level.

Note. CFA = confirmatory factor analysis.
Table 1. Model Fit Indices.

<table>
<thead>
<tr>
<th>Model</th>
<th>DF</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>Chi-square</th>
<th>Chi-square difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>The single-factor model (Model 1)</td>
<td>54</td>
<td>0.909</td>
<td>0.889</td>
<td>0.147</td>
<td>0.057</td>
<td>943.63</td>
<td></td>
</tr>
<tr>
<td>The two-factor model (Model 2)</td>
<td>53</td>
<td>0.947</td>
<td>0.935</td>
<td>0.113</td>
<td>0.045</td>
<td>566.81</td>
<td>376.81****</td>
</tr>
<tr>
<td>The single-factor model (Model 3)</td>
<td>54</td>
<td>0.902</td>
<td>0.880</td>
<td>0.154</td>
<td>0.058</td>
<td>1038.24</td>
<td></td>
</tr>
<tr>
<td>The two-factor model (Model 4)</td>
<td>53</td>
<td>0.935</td>
<td>0.919</td>
<td>0.127</td>
<td>0.048</td>
<td>708.76</td>
<td>329.48****</td>
</tr>
</tbody>
</table>

Note. CFI = comparative fit index; RMSEA = root-mean-squared error of approximation; TLI = Tucker–Lewis index; SRMR = standardized root mean square residual; DF = degrees of freedom.

***p < .001.

Table 1 suggests that in both waves, the two-factor models have a statistically significant improvement over the single-factor models, with a lower root-mean-squared error of approximation (RMSEA) value, a higher comparative fit index (CFI) value, and a statistically significant change in chi-square.

**Mediator: information repertoire filtration.** Information repertoire filtration was measured by asking “How frequently have you done the following on your most frequently used social media account in the past 6 months” (1 = never; 5 = always), averaging five items including (1) hiding or blocking someone’s comments or posts on social media because of his or her political viewpoints; (2) unfriending or unfollowing some friends because of political viewpoints; (3) leaving or opting out from an online group for political reasons; (4) unsubscribing from public social media pages because of their political viewpoints; and (5) reporting someone because of their political viewpoints (Wave 1: Cronbach’s α = .89; M = 2.30, SD = 0.95; Wave 2: Cronbach’s α = .89; M = 2.31, SD = 0.93).

**Moderator: affective polarization.** Affective polarization was measured by the favorability ratings of different political camps (Iyengar et al., 2012). Respondents were asked to rate their feelings toward each political camp in Hong Kong from 1 (least favorable) to 100 (most favorable). Pro-establishment ratings were negatively associated with pro-democracy ratings (Pearson r = -.50, p < .001) and localism ratings (Pearson r = -.52, p < .001), while pro-democracy ratings were positively associated with localism ratings (Pearson r = .75, p < .001). The results suggest that pro-democracy and localism are both opposing groups for the pro-establishment camp. Therefore, a different measure was constructed by subtracting the respondents’ ratings of pro-establishment from their average ratings of localism and pro-democracy (Liang & Zhang, 2021). The absolute value of this difference indicates the level of affective polarization (Wave 1: M = 4.36, SD = 3.09; Wave 2: M = 4.38, SD = 3.05; the range was rescaled from 1 to 10).

**Predictor: exposure to political disagreement.** The respondents were asked “how frequently do you encounter disagreement about the following issues on your most frequently used social media” to measure political disagreement, and three items were proposed: (1) politics or elections; (2) news or current events; and (3) public or community issues. Each item was measured on a 5-point scale (1 = never; 5 = always). The level of exposure to political disagreement was created by averaging these three items (Wave 1: Cronbach’s α = .90; M = 2.74, SD = 0.91; Wave 2: Cronbach’s α = .90; M = 2.78, SD = 0.90).

**Control variables.** Control variables included several sociodemographic variables such as gender, age, income, educational level, and several individual characteristics that have been crucial variables shaping political participation as found in previous studies (Campbell & Kwak, 2011; Niemi et al., 1991), including news use, the frequency of social media use, network size on social media, political efficacy, political trust, and political interest.

### Results

**Political Disagreement and Participation**

We used a two-wave panel design and SPSS PROCESS macro (Hayes, 2013) to test the proposed hypotheses and address the research questions. We used Model 4 from the PROCESS with 10,000 bias-corrected bootstrap samples and 95% confidence intervals (CIs) to test the direct effect of political disagreement on information repertoire filtration (H1) and political participation (H2), as well as the indirect effect of political disagreement on political participation through information repertoire filtration (H3). Statistical significance (p < .05) is achieved when lower bound (LL) and upper bound (UL) CI do not include zero. The model included the direct effects of political disagreement on activist and deliberative participation, as well as the indirect influences of political disagreement on both types of participation through information repertoire filtration. We used Wave 1 variables for political disagreement, social media information repertoire filtration, and affective polarization. The two types of political participation measured in Wave 2 were the dependent variables. We included Wave 1 levels of political participation as the autoregressive terms, which enabled us to evaluate the change in political participation. This was used to examine the causal inference of the independent variables on the dependent variables over time, isolating possible effects from the dependent variables in the previous wave. Table 2 reports the results.
Political disagreement is positively associated with information repertoire filtration (Model 1: $B = .1915; SE = .0353, p < .001$), supporting H1. Information repertoire filtration is positively associated with activism participation (Model 2: $B = .1037; SE = .0358, p < .01$) and is positively—but not negatively, as hypothesized—associated with deliberative participation (Model 3: $B = .1079; SE = .0364, p < .01$). Thus, H2a is supported but not H2b. Two indirect paths were identified: (1) political disagreement is positively associated with activism participation via information repertoire filtration (indirect effect = .0199, $SE = .0078$, 95% CI = [.0065–.0371]), and (2) political disagreement is positively— but not negatively, as hypothesized—associated with deliberative participation through information repertoire filtration (indirect effect = .0207, $SE = .0080$, 95% CI = [.0065–.0376]). Hence, H3a is supported but H3b is not supported.

The Moderation Role of Affective Polarization

We performed moderated mediation analysis using SPSS PROCESS Model 58 to examine (1) whether there is a moderating effect of affective polarization on the relationship between political disagreement and information repertoire filtration (H4); (2) whether there is a moderating effect of affective polarization on the relationship between information repertoire filtration and two types of political participation (H5); and (3) the extent to which the indirect effect of political disagreement on political participation through information repertoire filtration is contingent on individuals’ level of affective polarization (RQ1). Table 3 reports the results.

The interaction effect of political disagreement and affective polarization on information repertoire filtration was statistically significant (Model 1: $B = -.0186; SE = .0089, p < .05$), and therefore H4 is supported. The interaction effects of information repertoire filtration and affective polarization on activism participation was statistically significant such that information repertoire filtration had a greater effect on activists for those who were less politically polarized (Model 2: $B = -.020; SE = .0084, p < .05$). However, the effect of information repertoire filtration and affective polarization on deliberative participation was not statistically significant (Model 3: $B = -.014; SE = .0086, p = .103$). Hence, H5 was not supported.

Finally, to address RQ1, Table 4 reports the conditional indirect effects. It shows that the indirect effect of exposure to disagreement on activism participation via information repertoire filtration was stronger when the affective polarization was low (Effect = .044, $SE = .015$, 95% CI = [.016–.076]) compared to its counterparts when the affective polarization was high.

### Table 2. Autoregressive models predicting information repertoire filtration and participation (unstandardized coefficients and standard errors) ($N=757$).

<table>
<thead>
<tr>
<th></th>
<th>Filtration (W1)</th>
<th>Activism (W2)</th>
<th>Deliberation (W2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Constant</td>
<td>-.1519 (.2723)**</td>
<td>.4330 (.2681)</td>
<td>.4058 (.2729)</td>
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<tr>
<td>Disagreement (W1)</td>
<td>.1915 (.0353)**</td>
<td>.0456 (.035)</td>
<td>-.0007 (.0356)</td>
</tr>
<tr>
<td>Filtration (W1)</td>
<td>/</td>
<td>.1037 (.0358)**</td>
<td>.1079 (.0364)**</td>
</tr>
<tr>
<td>Polarization (W1)</td>
<td>.0143 (.0087)</td>
<td>.0083 (.0084)</td>
<td>-.0046 (.0086)</td>
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<td>The autoregressive terms</td>
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<td></td>
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<tr>
<td>Activism (W1)</td>
<td>.2047 (.0532)**</td>
<td>.5491 (.0523)**</td>
<td>.0259 (.0532)</td>
</tr>
<tr>
<td>Deliberation (W1)</td>
<td>.2968 (.0523)**</td>
<td>.0238 (.052)</td>
<td>.567 (.0529)**</td>
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<td>Control variables (W1)</td>
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<td></td>
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<tr>
<td>Female</td>
<td>.0676 (.0509)</td>
<td>.0225 (.0496)</td>
<td>-.0029 (.0505)</td>
</tr>
<tr>
<td>Age</td>
<td>-.0605 (.0224)**</td>
<td>-.0158 (.0219)</td>
<td>-.0536 (.0223)*</td>
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<tr>
<td>Education</td>
<td>.0349 (.0148)*</td>
<td>.0138 (.0145)</td>
<td>.0022 (.0147)</td>
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<td>Income</td>
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<td>.0125 (.0162)</td>
<td>.0165 (.0165)</td>
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<td>Social media use</td>
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<td>.0349 (.022)</td>
<td>.0222 (.0224)</td>
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<td>News media use</td>
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<td>.0392 (.0364)</td>
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<td>Social media news</td>
<td>.0265 (.0352)</td>
<td>.0325 (.0343)</td>
<td>.026 (.0349)</td>
</tr>
<tr>
<td>Network size</td>
<td>.1134 (.0331)**</td>
<td>.0887 (.0325)**</td>
<td>.1184 (.0331)**</td>
</tr>
<tr>
<td>Internal efficacy</td>
<td>.0614 (.0384)</td>
<td>.0181 (.0374)</td>
<td>.0082 (.0381)</td>
</tr>
<tr>
<td>External efficacy</td>
<td>-.0693 (.0336)*</td>
<td>-.0144 (.0328)</td>
<td>-.0589 (.0334)</td>
</tr>
<tr>
<td>Political trust</td>
<td>.0402 (.0349)</td>
<td>-.0908 (.034)**</td>
<td>-.0102 (.0346)</td>
</tr>
<tr>
<td>Political interest</td>
<td>-.0856 (.0309)**</td>
<td>.0921 (.0302)**</td>
<td>.0655 (.0307)*</td>
</tr>
<tr>
<td>R²</td>
<td>.518</td>
<td>.607</td>
<td>.598</td>
</tr>
<tr>
<td>F values</td>
<td>49.757***</td>
<td>67.182***</td>
<td>64.604***</td>
</tr>
</tbody>
</table>

*p < .001; **p < .01; *p < .05.
was medium (Effect = .022, SE = .008, 95% CI = [.007–.039]) or high (Effect = .007, SE = .006, 95% CI = [.004 to .021]). The indirect effect of exposure to disagreement on deliberative participation via information repertoire filtration was stronger when the affective polarization was low (Effect = .039, SE = .015, 95% CI = [.012–.071]) compared to its counterparts when the affective polarization was medium (Effect = .022, SE = .008, 95% CI = [.007–.040]) or high (Effect = .010, SE = .007, 95% CI = [.002 to .025]).

**Discussion and Conclusion**

While social media is often viewed as a medium to inform individuals about the diversity of opinion among their networks, there is increasing attention on ways in which social media enables users to reduce this diversity and communicate with more like-minded individuals. With a two-wave online panel survey conducted in an increasingly polarized political environment like Hong Kong, the current study

### Table 3. The moderated mediation models predicting information repertoire filtration and participation (unstandardized coefficients and standard errors) (N=757).

<table>
<thead>
<tr>
<th>Path</th>
<th>Filtration (W1)</th>
<th>Activism (W2)</th>
<th>Deliberation (W2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Constant</td>
<td>−1.0571 (.2755)***</td>
<td>.5470 (.2715)*</td>
<td>.4853 (.2769)</td>
</tr>
<tr>
<td>Disagreement (D) (W1)</td>
<td>.1958 (.0353)***</td>
<td>.0383 (.035)</td>
<td>−.0057 (.0357)</td>
</tr>
<tr>
<td>Filtration (F) (W1)</td>
<td>/</td>
<td>.1109 (.0358)**</td>
<td>.1129 (.0365)**</td>
</tr>
<tr>
<td>Polarization (P) (W1)</td>
<td>.0126 (.0087)</td>
<td>.0077 (.0084)</td>
<td>−.0050 (.0086)</td>
</tr>
<tr>
<td>D (W1) × P (W1)</td>
<td>−.0186 (.0089) *</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>F (W1) × P (W1)</td>
<td>/</td>
<td>−.02 (.0084) *</td>
<td>−.014 (.0086)</td>
</tr>
<tr>
<td>The autoregressive terms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activism (W1)</td>
<td>.2084 (.0531)***</td>
<td>.5509 (.0521)**</td>
<td>.0271 (.0532)</td>
</tr>
<tr>
<td>Deliberation (W1)</td>
<td>.29 (.0523)***</td>
<td>.0164 (.0519)</td>
<td>.5618 (.0529)***</td>
</tr>
<tr>
<td>Control variables (W1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.0658 (.0508)</td>
<td>.0204 (.0494)</td>
<td>−.0044 (.0504)</td>
</tr>
<tr>
<td>Age</td>
<td>−.0591 (.0223)**</td>
<td>−.0176 (.0218)</td>
<td>−.0549 (.0223)*</td>
</tr>
<tr>
<td>Education</td>
<td>.0336 (.0148) *</td>
<td>.0118 (.0144)</td>
<td>.0008 (.0147)</td>
</tr>
<tr>
<td>Income</td>
<td>−.0147 (.0167)</td>
<td>.0145 (.0162)</td>
<td>.0179 (.0165)</td>
</tr>
<tr>
<td>Social media use</td>
<td>.03 (.0225)</td>
<td>.031 (.022)</td>
<td>.0195 (.0224)</td>
</tr>
<tr>
<td>News media use</td>
<td>−.0028 (.0367)</td>
<td>−.0004 (.0357)</td>
<td>.0398 (.0364)</td>
</tr>
<tr>
<td>Social media news</td>
<td>.0214 (.0352)</td>
<td>.0325 (.0342)</td>
<td>.026 (.0349)</td>
</tr>
<tr>
<td>Network size</td>
<td>.109 (.0331)**</td>
<td>.0835 (.0324) *</td>
<td>.1149 (.0331)***</td>
</tr>
<tr>
<td>Internal efficacy</td>
<td>.0553 (.0384)</td>
<td>.0174 (.0373)</td>
<td>.0077 (.038)</td>
</tr>
<tr>
<td>External efficacy</td>
<td>−.0718 (.0335)</td>
<td>−.0195 (.0327)</td>
<td>−.0625 (.0334)</td>
</tr>
<tr>
<td>Political trust</td>
<td>.0263 (.0355)**</td>
<td>−.1093 (.0348)*</td>
<td>−.0231 (.0355)</td>
</tr>
<tr>
<td>Political interest</td>
<td>−.0845 (.0308)</td>
<td>.0887 (.0301) *</td>
<td>.0632 (.0307) *</td>
</tr>
<tr>
<td>R²</td>
<td>.521</td>
<td>.601</td>
<td>.599</td>
</tr>
<tr>
<td>F values</td>
<td>47.301 ***</td>
<td>64.171 ***</td>
<td>61.300 ***</td>
</tr>
</tbody>
</table>

***p<.001; **p<.01; *p<.05.

### Table 4. A summary of disagreement’s indirect effect on two types of participation via information repertoire filtration.

<table>
<thead>
<tr>
<th>Path</th>
<th>The level of affective polarization</th>
<th>Effect</th>
<th>SE</th>
<th>Bootstrap 95% CI LL</th>
<th>Bootstrap 95% CI UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD → F → Activism</td>
<td>Low</td>
<td>.044</td>
<td>.015</td>
<td>.016</td>
<td>.076</td>
</tr>
<tr>
<td>PD → F → Activism</td>
<td>Middle</td>
<td>.022</td>
<td>.008</td>
<td>.007</td>
<td>.039</td>
</tr>
<tr>
<td>PD → F → Activism</td>
<td>High</td>
<td>.007</td>
<td>.006</td>
<td>−.004</td>
<td>.021</td>
</tr>
<tr>
<td>PD → F → Deliberation</td>
<td>Low</td>
<td>.039</td>
<td>.015</td>
<td>.012</td>
<td>.071</td>
</tr>
<tr>
<td>PD → F → Deliberation</td>
<td>Middle</td>
<td>.022</td>
<td>.008</td>
<td>.007</td>
<td>.040</td>
</tr>
<tr>
<td>PD → F → Deliberation</td>
<td>High</td>
<td>.010</td>
<td>.007</td>
<td>−.002</td>
<td>.025</td>
</tr>
</tbody>
</table>

SE=standard error; CI=confidence interval; PD=political disagreement, F=information repertoire filtration. LL/UL=the lower/upper bound of the 95% confidence intervals. Low level = M−SD; middle level = M; and high level = M+SD.
contributes to an ongoing debate over how people react toward political disagreement on social media and its political consequences, and how the relationships are contingent on a person’s political predisposition in such a polarized political context—affective polarization. As one of the first studies to examine the political consequences of affective polarization, it extends this research to a non-Western Asian context. Several findings contribute to an understanding of the political role of social media in such a context.

First, the present study advances related studies on the disconnecting behaviors on social media and includes an enhanced range of indicators of information repertoire filtration. Our results are similar to previous findings that exposure to disagreement would lead to information repertoire filtration, and information repertoire filtration could facilitate political engagement. We reveal the antecedents and consequences of information repertoire filtration as a means of active avoidance and selectivity. Our study provides a more nuanced understanding on how people make use of social media to curate their sources and connections in responding to political conflicts in a high-choice and highly politically polarized environment.

Second, information repertoire filtration can trigger political participation. Results reinforce previous studies that information repertoire filtration leads to activism participation (Eveland & Hively, 2009; Nir, 2011). This can be explained by political homophily (McPherson et al., 2001), which is the tendency for people with similar political viewpoints to establish social ties and create a “clean environment where there are no or fewer counter-attitudinal voices” (John & Dvir-Gvirsman, 2015, p. 956).

However, in contrast to previous studies, information repertoire filtration also facilitates—but does not decrease—deliberative participation. It is plausible that the repertoire filtration as an active audience behavior helps people reflect more clearly on their own views (Price et al., 2002). This is regarded as a political gesture through which users disclose their political stance (John & Dvir-Gvirsman, 2015) and attract more like-minded peers. Residing in a homogeneous network might reduce one’s internal political ambivalence and intragroup conflicts, thus helping people who hold a strong political conviction to join political activities (Zhu et al., 2017). Meanwhile, with increasing polarization in Hong Kong, most political actions—even those conceptualized as iterative—are infused with political stances. Neutral common ground does not exist in which different political camps can communicate, such as in town forums or community meetings.

Third, the present study contributes to a less researched topic, that is, the political consequences of affective polarization. Unexpectedly, the effects of information repertoire filtration on political participation appear to be stronger for individuals with a lower affective polarization level. The “disagreement → filtration → participation” mechanism seems to be stronger when affective polarization is low. It is plausible that individuals who are less politically polarized will have more diverse social media connections and therefore be more likely to encounter disagreement, making them more likely to filter the disagreed connections to reduce psychological discomfort. Alternatively, they may have more diverse connections because they are not as polarized and wish to avoid polarized positions.

In Hong Kong, the social unrest and its aftermath have widened the gap between different political camps since mid-2019. The effect of filtration on participation is more salient for less polarized people. That is, those who are not in either extreme camp are more likely to face disagreeable communication. It is also plausible that those who are less politically polarized are more apathetic, politically. They may categorize most political expressions as disagreement and filter those people to avoid any potential conflicts. It is also likely that a ceiling effect drives the moderation effect with affective polarization; that is, the affectively polarized are likely to participate more, filter more, and see more disagreement, so these relationships are already maximized. Those who are not polarized are likely not as engaged with politics, so there is more room for those variables to affect one another. As a result, we can observe a more salient chain of the disagreement—filtration—participation.

Taken together, we offer a more nuanced understanding of how digital communication technologies, especially social media platforms, enable a highly personalized and politically motivated information repertoire for people to participate in public life. Even when political disagreement increases participation, such participation is achieved in part by filtering out disagreeable voices on social media. On the one hand, our results suggest that information repertoire filtration is a reasonable response to facilitating participation in politics. On the other hand, this might lessen the ability of people to comprehend the other side of an argument and thereby undermine deliberation (Mutz, 2006; Sunstein, 2009).

When activism participation—as an instance of participatory democracy—involves one-off short-term actions with homogeneous members, deliberative participation—as an instance of deliberative democracy—is equally crucial and helpful in nurturing a society with long-term and ongoing discussions among people who may not always agree with each other. Our results suggest that while social media does not cause polarization, it does make it easier for individuals in the middle-ground to become the victims of social media disconnection, particularly in a polarized context. In the long run, there will be highly self-connected clusters on social media, and it will be unlikely for users to be exposed to content at odds with their political orientation (Colleoni et al., 2014; Himelboim et al., 2013).

**Limitations**

When the current study relies on a stratified opt-in online panel, future studies can consider using a more strict
To conclude, the present study explores a nascent research agenda that examines disagreement-evoked (dis-)communication in online settings and the consequent political outcomes. It contributes to research on the connective logic of social media by offering countervailing evidence and debunking a technologically deterministic view of the political potential of social media. When the connectedness of social media grants people the liberty to manage their online connection, it also enables people to opt out of the marketplace of ideas, and the interplay between political disagreement and disagreement-evoked communication practices and its political outcomes is more nuanced in a politically divided environment. Polarization may be shaped by user choices rather than merely technical determinants. The current study offers a systematic empirical analysis of how social media may be a double-edged sword—having a dual effect—in both facilitating or jeopardizing political communication and thereby the well-being and civic culture of a polity (Almond & Verba, 1963).

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Supplemental Material

Supplemental material for this article is available online.

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