

Microblogging, Online Expression, and Political Efficacy Among Young Chinese Citizens: The Moderating Role of Information and Entertainment Needs in the Use of Weibo

Michael Chan, Ph.D.,¹ Xuan Wu, M.Sc.,² Yinqi Hao, M.Sc.,² Rui Xi, M.Sc.,² and Tian Jin, M.Sc.²

Abstract

In 2011, China's Internet population reached over half a billion users and the popular Twitter-like social networking service, Weibo, has been adopted by half of the users since its launch in August 2009. Given the potential of the Internet to facilitate a civic culture in the authoritarian state, the use of Weibo and its effects on citizens' political attitudes and behaviors are of important concern. A survey of 499 Weibo users found that intensity of use was related to increased willingness to express opinions about government and politics, the perception that one has the ability to participate in politics, and feelings that the government is not responsive to the demands of citizens. Moreover, the above relationships were moderated by the motivations of Weibo use, such that information motives strengthened the relationships while entertainment motives weakened the relationships.

Introduction

ALONG WITH THE MARKETIZATION and globalization of its economy, China's media environment has also undergone a massive change in the past two decades.¹ By 2011, the Internet population numbered over half a billion users.² One technology that has drawn considerable attention is Weibo, a Twitter-like social networking service launched in August 2009 very soon after the Chinese government blocked its citizens from accessing Facebook and Twitter. In 2010, only 13.8 percent of Chinese Internet users used Weibo. In 2011, almost half the Chinese Internet population (48.7 percent) used the service—a total of 250 million users.²

Like Twitter, Weibo allows users to post short 140-character messages on topics ranging from personal hobbies and interests to current affairs and politics. Unlike Twitter, Weibo also allows users to upload videos and images and comment on each other's posts. Moreover, since Chinese characters are based on a logogram rather than an alphabet system it is possible to include comparatively more information under the 140-character limit. These features provide a more information-rich environment in which to distribute and share information.

The service facilitates a hybrid virtual discursive space where citizens can express and share opinions on political issues and current affairs³ and its decentralized structure

poses a serious challenge to the central government by circumventing centralized information control and censorship. Nevertheless, self-censorship is pervasive, politically sensitive search words are blacklisted, and postings can be deleted by administrators without the consent or knowledge of users. This provides an important context in which to study the relationship between one of the most popular Internet technologies in China and its implications on citizens' political attitudes and behaviors in an authoritarian state. Drawing from both instrumental and psychological perspectives of Internet effects and integrated with uses and gratifications theory, this study explores the relationships between Weibo use and political attitudes and behaviors. These findings are important because they contribute to the overall debate on the prospects for democratic development and change in China.⁴

Weibo and political participation

In a one-party state, Chinese citizens have few opportunities to formally influence the government. Therefore, online discussion is one of the very few outlets available for citizens to express opinions about government and politics. As Delli et al.⁵ elaborate, individuals can "develop and express their views, learn the positions of others, identify shared concerns and preferences, and come to understand and reach judgments about matters of public concern" (p. 319).

¹Division of Language Studies, Community College of City University, Kowloon Tong, Hong Kong.

²School of Journalism & Communication, Chinese University of Hong Kong, Shatin, Hong Kong.

Earlier studies have found a direct relationship between Internet use and online expression in the form of posting personal opinions online.⁶ Such a finding before the era of microblogs supports the instrumental view of Internet effects, which emphasizes the reduced costs and convenience of access and the creation of new communication opportunities previously unavailable with traditional forms of media.⁷ Weibo also provides users some degree of anonymity (e.g., use of screen names), so there is less fear of sanctions from friends or acquaintances who have opposing views, or punishment from authorities. Because of these advantages there are more opportunities and incentives to express one's views. Therefore, it is expected that

H1a: Intensity of Weibo use is positively related to frequency of online expression about government and political affairs.

Weibo and political efficacy

The Internet with its plethora of messages also provides a symbolic environment for citizens to make sense of what is happening in the world.⁸ Weibo can lead to greater levels of political efficacy because (a) citizens can gain confidence that they can understand politics and current affairs and have the ability to participate in discussions if they want to; and (b) observe that the government is working for the interests of and is accountable to its citizens. These two dimensions of political efficacy are conceptualized as internal efficacy and external efficacy, respectively.⁹ The positive relationship between internal efficacy and media use has been well established in studies of newspaper and TV use,¹⁰ talk radio use,¹¹ online news,¹² and online campaign news.¹³ Thus, it is expected that

H1b: Intensity of Weibo use is positively related to internal efficacy.

While the first 2 hypotheses are in line with previous research, there are reasons to believe that Weibo use can also reduce external efficacy. The basis of this argument begins with the different discursive spaces in which news is disseminated and discussed in China: the official public space sanctioned and promulgated by the government through the traditional media, and the hybrid space on the Internet, particularly Weibo, where a variety of actors, media professionals, citizen journalists, activists, and engaged citizens, can create alternative discourses and realities.³ Tensions arise when discrepancies between the two realities cause citizens to question the motives and responsiveness of the government, particularly when political scandals and social injustices are reported, shared, and debated in hybrid space.^{14,15} Therefore, it is expected that

H1c: Intensity of Weibo use is negatively related to external efficacy.

The role of motivations

The psychological perspective argues that the effects of the Internet are not necessarily direct, but depends on individual's preexisting psychological dispositions, such as level of interest in politics.¹⁶ Uses and gratifications theory provides a useful framework because it assumes that users are active in

the choices of what communication channels to use to access particular content; that such choices are made based on the gratification of certain needs that can be obtained from the content; and that certain communication channels are more effective than others in satisfying such needs.¹⁷

Two types of media uses most often addressed and measured in the political communication literature are information and entertainment uses. In general, informational uses of media result is positively related to politically relevant variables, such as social capital and discussion of politics.^{18,19} On the other hand, entertainment uses lead to lower levels of political efficacy, political knowledge, and political participation.^{20,21}

To date, the closest and most relevant study to Weibo was Leung's²² study of the motivations of online content generation, which found that four motivations were correlated with frequency of user-generated content: recognition, informational, social, and entertainment.

Given the importance of information and entertainment needs, it is expected that these psychological antecedents can also accentuate or weaken the relationship between Weibo use and political attitudes and behaviors, such that those who are motivated to find out more about the current affairs and keep up to date with politics are even more likely to use Weibo to express their feelings, feel that they are capable of participating in politics, and that the government is not responsive to its citizens. Conversely, such perceptions can be reduced for those who use Weibo primarily for entertainment purposes, such as following soft news and gossip. Therefore, the following interaction effects are proposed:

H2a: The relationship between Intensity of Weibo use and willingness to express opinions about government and politics will be stronger for those with high information motive.

H2b: The relationship between Intensity of Weibo use and willingness to express opinions about government and politics will be weaker for those with high entertainment motive.

H3a: The relationship between Intensity of Weibo use and internal efficacy will be stronger for those with high information motive.

H3b: The relationship between Intensity of Weibo use and internal efficacy will be weaker for those with high entertainment motive.

H4a: The relationship between Intensity of Weibo use and external efficacy will be weaker for those with high information motive.

H4b: The relationship between Intensity of Weibo use and external efficacy will be stronger for those with high entertainment motive.

Method

Participants and procedure

Respondents completed an online survey from October 27 through December 1 2011 hosted on www.sojump.com. The language was in Chinese and a sample of 574 respondents was obtained using snowball sampling. Such a nonprobability sampling strategy has the advantage in allowing researchers to access and study a specific online population (i.e., Weibo users), but at the same time it is susceptible to self-selection bias that may affect the generalizability and interpretability of the findings.²³ Nevertheless, given the nature of

the phenomenon, the present sample was adequate for the purposes of the study. Of the 574 respondents 499 were Weibo users. They were young (7 percent under 21 years; 59 percent 21–25 years; 22 percent 26–30 years; 10 percent 31–35 years; 1 percent 36–40 years; 1 percent above 41 years) and educated (10 percent high school; 67 percent undergraduate; 21 percent postgraduate; and 2 percent doctorate). Females comprised 58 percent of the sample and males 42 percent.

Measures

Online expression. Respondents were asked according to a 5-point Likert scale (1=very little to 5=a lot): *How often do you use Weibo to express your opinions about government and politics?* ($M=2.67$, $SD=1.10$).

Political efficacy. Questions from Kenski and Stroud¹³ were adopted to measure the two dimensions of political efficacy. Respondents answered according to a 5-point Likert scale (1=strongly disagree to 5=strongly agree): (a) *People like me don't have any say about the government does*, and (b) *Sometimes politics and government seem so complicated that a person like me can't really understand what's going on*. The first item measured external efficacy ($M=3.04$, $SD=1.09$) and the second item internal efficacy ($M=3.33$, $SD=1.05$). The two items were moderately correlated ($r=0.48$, $p<0.001$). Lower scores indicated increased efficaciousness, but will be reverse coded for subsequent analyses.

Weibo use intensity. The Facebook Intensity scale²⁴ was adapted to measure intensity of Weibo use. All questions were translated into Chinese, references to Facebook were changed to Weibo, and two additional questions were added to take into account the idiosyncratic features of Weibo (e.g., the number of followers). The first two questions adopted a 9-point Likert scale: (a) *About how many people do you follow on Weibo?* and (b) *How many people follow your Weibo?* (1=less than 50, 2=51–100, 3=101–150, 4=151–200, 5=201–300, 6=301–400, 7=more than 401, 8=401–500, 9=more than 501). A 4-point scale measured frequency of use: (c) *How often do you use Weibo in a day?* (1=less than once, 2=1–4 times, 3=5–9 times and 4=more than 10 times). A 5-point scale measured time spent: *How much time do you use Weibo in a day?* (1=less than 15 minutes, 2=15–30 minutes, 3=31–60 minutes, 4=61–90 minutes, and 5=more than 90 minutes).

Respondents then answered the following according to a 5-point Likert scale (1=strongly disagree to 5=strongly agree): (a) *Weibo is part of my everyday activity*, (b) *I am proud to tell people I'm on Weibo*, (c) *Weibo has become part of my daily routine*, (d) *I feel out of touch when I haven't logged onto Weibo for a while*, (e) *I feel I am part of the Weibo community*, and (f) *I would be sorry if Weibo shut down*. Table 1 below summarizes the individual items of the scale. Cronbach's alpha for the Weibo intensity scale ($M=3.07$, $SD=0.82$) was 0.90 after standardization of relevant items to a 5-point scale.

To assess Weibo-use motivations, respondents were given a list of statements adapted from previous studies of user-generated online content²² and gratifications of social network sites.²⁵ All items were answered according to a 5-point Likert scale (1=strongly disagree to 5=strongly agree).

TABLE 1. SUMMARY STATISTICS FOR WEIBO USE INTENSITY

Items	M	SD
About how many people do you follow on Weibo? (1–9) ^a	3.65	2.42
How many people follow your Weibo? (1–9) ^a	2.73	1.75
How often do you use Weibo in a day? (1–4) ^a	2.43	1.04
How much time do you use Weibo in a day?	2.62	1.33
Weibo is part of my everyday activity	3.45	1.02
I am proud to tell people I'm on Weibo	3.63	0.97
Weibo has become part of my daily routine	3.68	1.01
I feel out of touch when I haven't logged onto Weibo for a while	3.29	1.06
I feel I am part of the Weibo community	3.54	0.98
I would be sorry if Weibo shut down	3.48	1.06

^aMeans and standard deviations are based on prestandardized figures. They were subsequently recoded to a 1 to 5 range before taking an average to create the scale.

Recognition needs. (a) *To establish my personal identity*, (b) *To gain respect and support*, (c) *To build up my confidence*, (d) *Because it is satisfying*, and (e) *To promote or publicize my expertise*. Cronbach's alpha was 0.85 ($M=3.11$, $SD=0.76$).

Information needs. (a) *To broaden my knowledge base*, (b) *To find out what is going on in society*, (c) *To understand events that are happening*, (d) *To refine my thinking*, and (e) *To get useful information*. Cronbach's alpha was 0.84 ($M=3.80$, $SD=0.68$).

Social needs. (a) *To express my feeling*, (b) *To share my views, thoughts, and experience*, (c) *To stay in touch with people I know*, (d) *To get peer support from others*, and (e) *To meet interesting people*. Cronbach's alpha was 0.81 ($M=3.74$, $SD=0.68$).

Entertainment needs. (a) *To pass time*, (b) *Because I am curious*, (c) *Because it is entertaining*, (d) *Because it is funny*, and (e) *Because it is trendy*. Cronbach's alpha was 0.74 ($M=3.64$, $SD=0.63$).

Interest in government and politics. Political interest is included as a control variable because it is an important predictor of political participation behaviors.¹⁶ Respondents answered according to a 5-point Likert scale (1=very uninterested to 5=very interested): *How interested are you in government and political affairs?* ($M=3.35$, $SD=0.89$).

Demographics. Personal information, including gender, age, and education level, was included as control variables since they are often associated with political attitudes and behaviors.^{13,16}

Results

Hierarchical regression analyses were used to test the hypotheses and the results are summarized in Table 2. The combination of predictors significantly predicted online expression ($R=0.55$, $R^2=0.30$, $F(9,489)=23.16$, $p<0.001$), internal efficacy ($R=0.29$, $R^2=0.09$, $F(9,489)=5.05$, $p<0.001$) and external efficacy ($R=0.26$, $R^2=0.07$, $F(9,489)=3.88$, $p<0.001$). Hypotheses H1a, H1b, and H1c proposed that intensity of Weibo use will predict online expression, internal

TABLE 2. PREDICTORS OF ONLINE EXPRESSION AND POLITICAL EFFICACY

	Online expression (n=499)				Internal efficacy (n=499)				External efficacy (n=499)			
	B	(SE)	β	T	B	(SE)	β	t	B	(SE)	B	T
Block 1												
Gender	-0.27	(0.09)	-0.12	-3.13**	0.16	(0.10)	0.08	1.69	-0.09	(0.10)	-0.04	-0.93
Age	0.05	(0.05)	0.04	1.00	-0.03	(0.06)	-0.02	-0.54	-0.02	(0.06)	-0.01	-0.30
Education	-0.04	(0.07)	-0.02	-0.59	0.24	(0.08)	0.14	3.17**	-0.22	(0.08)	-0.12	-2.82**
Interest in politics	0.20	(0.05)	0.16	4.04***	0.07	(0.06)	0.06	1.24	0.10	(0.06)	0.08	1.75
Weibo use intensity	0.16	(0.07)	0.12	2.17*	0.15	(0.08)	0.12	1.87#	-0.16	(.08)	0.12	-1.87#
Recognition	0.23	(0.09)	0.16	2.64**	0.13	(0.10)	0.10	1.37	0.33	(0.10)	0.23	3.22***
Information	0.36	(0.10)	0.22	3.78***	0.10	(0.10)	0.07	0.97	-0.10	(0.11)	-0.06	-0.93
Social	0.07	(0.11)	0.04	0.63	-0.13	(0.12)	-0.09	-1.14	-0.19	(0.12)	-0.12	-1.56
Entertainment	-0.09	(0.09)	-0.05	-1.00	-0.36	(0.10)	-0.22	-3.62***	0.16	(0.10)	0.09	1.50
Adjusted R ² (percent)	28.6				6.8				5.0			
Block 2												
Weibo × Information	0.21	(0.08)	0.14	2.63**	0.19	(0.09)	0.14	2.20*	-0.07	(0.09)	-0.05	-0.80
Weibo × Entertainment	-0.25	(0.09)	-0.16	-2.86**	-0.27	(0.10)	-0.18	-2.84**	0.21	(0.10)	0.13	2.05*
Final adjusted R ² (percent)	29.6				8.0				5.5			

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, # $p < 0.06$.

efficacy, and external efficacy, respectively. Results showed that the relationship was significant for online expression ($\beta = 0.12$, $p < 0.05$), but not internal efficacy ($\beta = 0.12$, $p = 0.06$) and external efficacy ($\beta = -0.12$, $p = 0.06$), though marginally so.

To examine the moderating effects of motives on Weibo use, two interaction terms were created (all were centered to reduce multicollinearity) and entered as the second block of variables in each of the models. The combination of predictors significantly predicted online expression ($R = 0.56$, $R^2 = 0.31$, $F(11,487) = 20.07$, $p < 0.001$), internal efficacy ($R = 0.32$, $R^2 = 0.10$, $F(11,487) = 4.95$, $p < 0.001$) and external efficacy ($R = 0.28$, $R^2 = 0.08$, $F(11,487) = 3.62$, $p < 0.001$). H2a and H2b proposed that information motives will strengthen the effects of Weibo use on online expression about government and politics, while entertainment motives will reduce the strength of the relationship. Results support both hypotheses, such that the relationship between Weibo use and online expression was strengthened by information motives ($\beta = 0.14$, $p < 0.01$) and weakened by entertainment motives ($\beta = -0.16$, $p < 0.01$). The same pattern of findings was demonstrated for internal efficacy, such that the relationship between Weibo use and internal efficacy was strengthened by information motives ($\beta = 0.14$, $p < 0.05$) and weakened by entertainment motives ($\beta = -0.18$, $p < 0.01$). H3a and H3b were supported. For external efficacy, only the interaction between Weibo use and entertainment motive was significant, such that entertainment motives strengthened the relationship between Weibo use and external efficacy ($\beta = 0.13$, $p < 0.05$). H4b was supported, while H4a was not.

Overall, of the nine hypotheses proposed in the study, six were significant.

Discussion

In a very short space of time, Weibo has reached critical mass in China and has facilitated a virtual space where news and views are disseminated before authorities and censors could react. Several conclusions can be made from this study. First, Weibo provides an important outlet for Chinese citizens to share their views and develop a greater understanding of

politics. More worrying for the Chinese authorities is that increased Weibo use also leads to perceptions that the government is not answerable to its citizens. A likely reason is that Weibo is one of the few places where anti-government sentiments and comments can be found and expressed. Among the government's responses include making occasional arrests of those accused of spreading false rumours²⁶ and to integrate political institutions into the hybrid space by encouraging departments and officials of all levels to open Weibo accounts to facilitate communications with citizens.²⁷ Whether these steps will worsen or improve government/citizen communications and subsequent perceptions of the government remain to be seen.

Second, if the gap between internal efficacy and external efficacy continues to widen the prospects for government-challenging behavior in the hybrid space has the potential to increase. Drawing from Gamson's²⁸ early theorizing Craig²⁹ proposed that the combination of high internal efficacy and low external efficacy was the optimal combination that would motivate people to engage in protests.

Third, the significant interaction effects demonstrate that concerns among Western scholars that the Internet can exacerbate a tuned-in and the tuned-out gap among citizens in Western democracies³⁰ is equally applicable to the Chinese context. While citizens who are motivated to seek out information on politics and current affairs online may become more knowledgeable about politics, and thus be more equipped and willing to be engaged in political discussion and participation, the opposite seems to be case for those who use the communication technologies for more trivial or pleasure-seeking purposes.

This study makes several contributions to the literature. There has been much scholarly discussion and literature about the relationships between government, media, and society in China at the macro level. This study provides a timely individual-level analysis of the effects of Weibo. Theoretically, the study demonstrates the utility of adapting the uses and gratifications framework to explain the psychological antecedents of technology use and subsequent outcomes. Different motivations can lead to vastly different outcomes, which may not be evident if researchers only measured frequently of technology use.

Several limitations and suggestions for further research need to be addressed. The current sample is skewed towards younger educated Chinese because they are the heaviest users of the Internet. Therefore, the findings cannot be generalizable to other demographics in China. The use of multiple items to measure the key dependent variables will also provide broader and more reliable measures. Moreover, while the current study successfully adapted and applied the Facebook Use Intensity Scale in a cross-cultural context, future studies may need to address whether the scale is a multi-rather than one-dimensional measure. Finally, it should be noted that the cross-sectional design of this study cannot account for causality between the variables. Even though this study provided a theoretically informed argument based on previous literature that Weibo use can affect political attitudes and behaviors, it is also feasible that the relationship works the other way, so longitudinal studies will be useful to ascertain the direction of the relationships.

Author Disclosure Statement

No competing financial interests exist.

References

- Huang C. From control to negotiation: Chinese media in the 2000s. *International Communication Gazette* 2007; 69: 402–412.
- CNNIC. (2012) Statistical reports on the Internet development in China. www.cas.cn/xw/yxdt/201201/W020120116371150443810.pdf (accessed Feb. 2012)
- Chan JM, Zhou B. Expressive behaviors across discursive spaces and issue types. *Asian Journal of Communication* 2011; 21:150–166.
- Wang Z. Public support for democracy in China. *Journal of Contemporary China* 2007; 16:561–579.
- Delli Carpini MX, Cook FL, Jacobs LR. Public deliberations, discursive participation and citizen engagement: a review of the empirical literature. *Annual Review of Political Science* 2007; 7:315–344.
- Shen F, Wang N, Guo Z, Guo L. Online network size, efficacy, and opinion expression: assessing the impacts of Internet use in China. *International Journal of Public Opinion Research* 2009; 21:451–476.
- Bimber B. Information and political engagement in America: the search for effects of information technology at the individual level. *Political Research Quarterly* 2001; 54:53–67.
- Bandura A. Social cognitive theory of mass communication. *Media Psychology* 2001; 3:265–299.
- Niemi RG, Craig SC, Mattei F. Measuring internal political efficacy in the 1988 National Election Study. *The American Political Science Review* 1991; 85:1407–1413.
- McLeod JM, Guo Z, Daily L, et al. The impact of traditional and nontraditional media forms in the 1992 presidential election. *Journalism and Mass Communication Quarterly* 1996; 73:401–416.
- Newhagen JE. Self-efficacy and call-in political television show use. *Communication Research* 1994; 21:366–379.
- Lee KM. Effects of Internet use on college students' political efficacy. *Cyberpsychology and Behavior* 2006; 9:415–422.
- Kenski K, Stroud NJ. Connections between Internet use and political efficacy, knowledge, and participation. *Journal of Broadcasting and Electronic Media* 2006; 5:173–192.
- Wong E. (2011) Contaminated milk is destroyed in China. www.nytimes.com/2011/12/27/world/asia/contaminated-milk-is-destroyed-in-china.html?ref=foodsafety (Access Feb. 2012).
- Wong E. (2011) An online scandal underscores Chinese distrust of state charities. www.nytimes.com/2011/07/04/world/asia/04china.html?pagewanted=all (Access Feb. 2012).
- Xenos M, Moy P. Direct and differential effects of the Internet on political and civic engagement. *Journal of Communication* 2007; 57:704–718.
- Katz E, Blumler JG, Gurevitch M (1974) Utilization of mass communication by the individual. In Blumler JG, Katz E, eds. *The uses of mass communications: Current perspectives on gratifications research*. Sage: Beverly Hills, pp. 19–32.
- Shah D, McLeod JM, Yoon S. Communication, context, and community—An exploration of print, broadcast, and Internet influences. *Communication Research* 2001; 28:464–506.
- Eveland WP, Jr., Hayes AF, Shah DV, Kwak N. Understanding the relationship between communication and political knowledge: a model comparison approach using panel data. *Political Communication* 2005; 22:423–446.
- Prior M. News vs. Entertainment: how increasing media choice widens gaps in political knowledge and turnout. *American Journal of Political Science* 2005; 49:577–592.
- Scheufele DA, Nisbet MC. Being a citizen online: new opportunities and dead ends. *The Harvard International Journal of Press/Politics* 2002; 7:55–75.
- Leung L. User-generated content on the Internet: an examination of gratifications, civic engagement and psychological empowerment. *New Media and Society* 2009; 11:1327–1347.
- Wright, K.B. Researching Internet-based populations: advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication* 2005; 10. <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2005.tb00259.x/full> (accessed Oct. 2011).
- Ellison NB, Steinfield C, Lampe C. The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication* 2007; 12:1143–1168.
- Park N, Kee KF, Valenzuela S. Being immersed in social networking environment: Facebook Groups, uses and gratifications, and social outcomes. *Cyberpsychology and Behavior* 2009; 12:729–733.
- Xinhua. (2011) China detains two men for spreading false information online. news.xinhuanet.com/english/china/2011-12/12/c_131301672.htm (accessed Feb. 2012)
- Weihong T. (2011). How to communicate with masses in microblog era. [cited 2012 Feb. 20]; Available from: <http://english.peopledaily.com.cn/90780/7459246.html>.
- Gamson WA. (1968) *Power and discontent*. Homewood, Ill: Dorsey Press.
- Craig SC. The mobilization of political discontent. *Political Behaviour* 1980; 2:189–209.
- Norris P. (2001) *Digital divide: civic engagement, information poverty, and the Internet worldwide*. New York: Cambridge.

Address correspondence to:

Dr. Michael Chan
Division of Language Studies
Community College of City University
Tat Chee Ave.
Kowloon Tong
Hong Kong

E-mail: mcmchan@cityu.edu.hk

Copyright of CyberPsychology, Behavior & Social Networking is the property of Mary Ann Liebert, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.