Implicit and Explicit Control: Modeling the Effect of Internet Censorship on Political Protest in China

JIAYIN LU YUPEI ZHAO Sun Yat-sen University, China

This study brings the theory of structural threats to Internet research to examine the impact of Internet censorship on young adults' political expression and protest. Conducted with a Web survey of university students in China (N=2,188), this study shows, first, that the degree of awareness of Internet laws and regulations can contribute directly to young adults' political protests or accelerate their political protest through online political expression, and second, that the degree of psychological perception of Internet censorship can directly weaken political protest or indirectly limit it by curtailing young people's online political expression. Moreover, Internet censorship as an intended threat leads to political protest, but the relationship between Internet censorship and political protest is mediated through online political expression. This article discusses the implications of the findings for freedom of speech and Internet regulation under an authoritarian regime.

Keywords: structural threats, Internet censorship, political expression, political protest

Political protest has grown recently in the digital agora, particularly among young people (Lilleker & Koc-Michalska, 2017; Yamamoto, Kushin, & Dalisay, 2015). Citizens have engaged in powerful forms of political participation through digital technology—for instance, in the Zapatista uprising in Mexico (Abigail, 2011), the Arab Spring protests (Carolina, 2017), protests in Russia and Ukraine, the Taiwan Sunflower movement (Tsatsou & Zhao, 2016), and protests surrounding the election of Donald Trump in 2016 (Lawrence & Boydstun, 2017). Each civically oriented activity contributes to a deeper level of democratic engagement (Lilleker & Koc-Michalska, 2017). It should not be forgotten that the proliferation of the Internet has empowered citizens of authoritarian countries to express themselves politically and to protest (Couldry, 2015; Dimitrov, 2017; R. Hu, 2015). In recent years, there have been increasing numbers of cases involving Chinese young adults, and these are best exemplified by the 2015 "Wuhan Car Protest." These suggest

Jiayin Lu: medialaw@qq.com

Yupei Zhao (corresponding author): Office No.204, School of Communication and Design (传播与设计学院), Sun Yat-sen University (中山大学), Panyu District, Guangzhou 510006, China, yupei@yng.media Date submitted: 2017–12–05

Copyright © 2018 (Jiayin Lu and Yupei Zhao). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at http://ijoc.org.

¹ On June 15, 2015, the police of the Hanyang Road Transport Management Office in the Wuhan District, Wuhan, investigated a suspected illegal Uber driver, which resulted in serious road congestion due to a large number of protesting drivers and crowds.

that the Internet has a structural effect on young adults' awareness of their ability to use the Internet for political mobilization.

To deal with the challenges of citizens' political expression, group mobilization, and e-activism, the Chinese government has issued a series of laws and regulations (e.g., the China Network Security Law 2016²) for the governance of the virtual environment; the first, in 1994, was the PRC Internet Information System Security Protection Policy (Dimitrov, 2017; Y. Hu, 2010). Since the founding of the Cyberspace Administration of China (CAC) in 2014, there has been a significant move to recentralize state power after a period of decentralized Internet governance; this spans content censoring to capital supervision, and Web service providers to individuals (Y. Hu, 2010).

Scholars have researched the influence of complete Internet blackouts (Greitens, 2013; Ha, John, John, & Chung, 2016) and the interrelationships between political attitudes and participation through the Internet (S. I. Wang, 2007), and some research has looked at the effect of surgical censorship, such as authorities' removal of citizens' online posts (Repnikova, 2017; Roberts, 2014). Yet few studies have explored the effects of Internet censorship on young adults' political protest based on their perceptions. It is noteworthy that young people are politically socialized and gradually mature physiologically, psychologically, and socially—that is, one undergoes "the developmental processes by which people of all ages and adolescents acquire political cognition, attitudes, and behaviours" (Powell & Cowart, 2015, p. 29). This indicates that political orientations and participatory habits maintained in this period play a significant role across individuals' whole lives (Zhang, 2010, p. 137). Therefore, this article first brings the theory of structural threats to Internet research and then extends it by examining the impact of Internet censorship on young adults' political protest and the mediation effect of online political expression.

Structural Threats Theory

According to a prominent discussion in *On the Nature of Threat: A Social Psychological Analysis*, in structural threats theory, threats are defined as "threats in place or as implicit threats viewed over the long term" (Milburn & Watman, 1981, p. 12). Examples of areas where structural threats can arise include natural forces, enforcement of the law, and longstanding national interests. Structural threats may be classified as intended threats or perceived threats. Intended threats, also called implicit threats, are threats conveyed by nonverbal explicative action; this means that the threatener never explicitly states their intended actions, and the target of the threat is sometimes unclear. There are three advantages to implicit threats, whose power has been proved throughout history. First, when compared with explicit threats, implicit threats are less personal. Thus, the target may not respond immediately. Second, credibility is higher because the threatener indicates that they are not averse to action. Third, implicit threats work as a projective test for ambiguity (Milburn & Watman, 1981, p. 11). It is important to establish whether the target of an implicit threat will do nothing (due to a lack of awareness of being threatened) or overreact (due to exaggerating the effect of the threat).

² See http://www.miit.gov.cn/n1146295/n1146557/n1146614/c5345009/content.html.

A perceived threat is also referred to as an explicit threat. An advantage of an explicit threat is that the threatener can remove any unclear conditions so as to maximize its control over when the threat is delivered and how it is targeted, and to ensure that the threat is delivered clearly (either orally or via written documents). However, the possibility of failure is much higher than with an implicit threat because of the possibility of retaliation by the target (Milburn & Watman, 1981). In the context of the Internet, a perceived threat is caused by "users' estimations of the probability and consequence of Internet censorship, as well as estimations of the government's intention and capability to execute the censorship" (X. Wang, 2009, p. 140). A perceived threat enables users' fear appeal to be stimulated and results in their "danger control process" and "fear control process" (Lo, Wei, & Lu, 2017; Witte & Morrison, 2000); this means a higher probability of danger or a more serious consequence of the danger, so users are more likely to be frightened and thus to try to avoid the danger.

Few researchers have studied the concept of structural threats. Douglas (1998) discussed federalism, which acts as a structural threat to liberty, using lessons from a comparative analysis of the court case *City of Boerne v. Flores* (1997); the case concerned conflicts between states' rights and federal protections of liberty. Douglas concentrated on "multiple threats" to liberty, but paid less attention to enriching the understanding of the concept itself. De Wall (2003) studied why the HIV/AIDS pandemic in Africa is a structural threat to the continent's governance, economic development, democracy, peace, and national security, typically when concerning the structural political-economic impact of mass illness and death. However, he did not concentrate on theoretical grounding as well, and his study was not directly concerned with Internet research.

In China, structural threats theory helps us to understand that Internet censorship may be considered a practice of structural threats on the grounds of its nature, history, and legality in China (X. Wang, 2009). Social psychological expert Solomon E. Asch (1952, p. 375) indicated that when the target is aware of the legitimacy of a threat, the threat itself carries a sense of "requirement" or "ought." According to the classification of structural threats, Internet censorship in China possesses the characteristics of both intended threat and perceived threat (as introduced earlier). The first layer of Internet censorship is an example of intended threat, referring to the censors' intent to threaten citizens. However, citizens may not be aware of this threat, especially when they have knowledge of the relevant laws and regulations. They might not act on the threat at all, owing to their ability to avoid censorship while mobilizing socially (Greitens, 2013; X. Wang, 2009). The second layer of Internet censorship in China relates to citizens' psychological perception, which arises from their evaluation of the intentions and abilities of the authorities and from how censorship is conveyed (i.e., its clarity and presentation); their perception will also be affected by whether they have been summoned, fined, or arrested (X. Wang, 2009). The more they feel that the censorship of the Internet is explicit and perceived, the less they will put trust in the Internet and political participation (X. Wang, 2009).

Regarding the effect of Internet censorship, self-censorship is the main method that the government and content providers encourage citizens to practice (Hachigian, 2001; Repnikova, 2017). For instance, most citizens learn to delete their own sensitive political posts rapidly, minimizing opportunities to participate in public affairs (King, Pan, & Margaret, 2013; Lee, 2016). In fact, Internet censorship in China neither "kills" the use of the Internet nor stops the spread of rumors. It does not slow the spread of

information, and it eases the relationship between citizens and authorities (Greitens, 2013; Roberts, 2014). From the perspective of the authorities, it can help to "clean" the online environment by minimizing radical critique of those authorities and of policies and politicians (King et al., 2013; Shirk, 2011). Yet censorship also restrains citizens from extending their criticism of the original subject to other areas (Lee, 2016). In particular, it decreases the number of critiques of government and administrative officers (*chou guan*; Xiong, 2014).

Structural threats theory can help to identify two potential effects of Internet censorship in China. First, censorship might give rise to anticensorship sentiments—for instance, anxiousness, anger, or curiosity. These negative sentiments might lead citizens to actively seek out posts that have been deleted by censors, which undermines the effectiveness of the government's censorship laws (Hachigian, 2001; Roberts, 2014; Xi, 2015). Digital resistance is more likely to occur in states with little respect for human rights (Ziccardi, 2013). The second possibility is that if citizens have fears about deleted posts, they will interact less in online discussions about sensitive subjects (Lee, 2016; Roberts, 2014).

Laws and Regulations of the Internet in China

Since the Internet was introduced in China in 1997, a series of laws and regulations relating to its governance have been launched that cover services, ownership, content, and expressive behaviors. These include two national laws, five judicial interpretations, seven administrative regulations, eight department-level provisions, and eight documents covering administrative standards. Examples include the Telecommunications Regulations 2000, the Cybersecurity Law of the PRC 2016, and the Provisions for the Administration of Group Information Services 2017. Regulations released in January 2000 prohibiting the online transmission of "state secrets" serve as a useful catchall for limiting content (Hachigian, 2001), as do extensive regulations issued in recent years prohibiting content that subverts state power, disturbs the social order, and violates others' rights.

In parallel with these laws and regulations, as mentioned earlier, a new Office of the Central Leading Group for Cyberspace Affairs (the CAC) was established in 2014; it is chaired by Xi Jinping, General Secretary of the Communist Party of China, and it has explicit responsibility for regulating the Internet. The State Council and its ministries are responsible for shaping the concrete measures necessary to implement the CAC's decisions, although tensions between the CAC and other departments remain (Creemers, 2017). The CAC's decisions have been strictly implemented in the framework for cyberspace security. The consequences and penalties associated with these laws and regulations are enforced at various levels. Organizations that break the regulations will be summoned by the relevant provincial branch of the CAC. Individuals who break the regulations will have their online posts deleted and their account will be blocked by the CAC or one of its branches; individuals may even receive a warning or be dismissed by their employer. Individuals who break the law are summoned or arrested by local police. Two online culprits, Qin Huohuo and Li'erchaisi, were sentenced to three years' and four years' imprisonment, respectively. They were accused of mobilizing an "Internet Water Army" (wangluo shuijun) that flooded social media with false information (Creemers, 2017).

Online Political Expression and Political Protest

Online political expression relates to individuals who make use of social network services (SNSs) to construct their political opinions in semipublic or even private ways (boyd & Ellison, 2008; Ellison & boyd, 2013) in order to support or object to a candidate or policy. Its purpose lies in involving oneself in the whole process of policy making (Boyle et al., 2006; Dai, 2010), meaning that citizens' political expression evolves from the expression of citizenship to the practice of deliberative democracy. This widens the understanding of political participation (S. I. Wang, 2007). The more citizens express themselves online, the greater the possibility that their role will change from an outsider to a participant, which eventually leads to offline political action (Gil de Zúñiga, Molyneux, & Zheng, 2014).

Citizens' online political expression has a significant effect in relation to inspiring their political awareness, political orientation, and political behaviors (Boyle et al., 2006), especially for young adults (Kushin & Yamamoto, 2010). While the relationship between content production and consumption has changed, the degree of young adults' political participation has improved through online reading, searching, and sharing of political information. For instance, Gil de Zúñiga et al. (2014) found that political expression mediated the effect of social media on political participation in the United States.

Political protest refers to public group activities that use confrontational politics to apply pressure to specific targets to affect public policy or to prevent or demand a government or departmental action (Gao, 2016). Since the 1990s, taxes, conscription, administrative corruption, and land expropriation have been the main issues in Chinese rural resistance (Bianco & Hua, 2009). Before the emergence of the Internet, labor strikes were the most popular way to protest (Gao, 2016). Methods of political protest comprise online petitions, street parades, bypassing the immediate leadership, presenting appeals to the authorities, and violence against politicians and law enforcement officers offline (Lu, 2016). The Internet has moved the process of political protest from offline to online (Lu, 2018), and digital networks enable faster political mobilization, accelerated cycles of action, and some new forms of collectivity (Couldry, 2015).

In the Chinese case, some scholars have studied how online political expression through social media has increased citizens' nationalistic sentiment and attitudes in support of the Chinese sociopolitical system (Hyun & Kim, 2015). Others have illustrated the importance of Weibo in supporting citizens' abilities to share and develop their understanding of politics in China, although citizens have received little response from the government through Weibo (Chen, Wu, Hao, & Xi, 2012). Still others have demonstrated how Chinese citizens have engaged in the process of policy making (Xiao, 2011) and how they have employed diverse and creative means to enact political discourses and expressions (e.g., satire, irony, coded words) in response to online censorship (Yu, 2009), conventionally or contentiously (Hyun & Kim, 2015).

Internet censorship may be beneficial in terms of forbidding pornographic content and violent terrorist information and containing the spread of rumors (Lu et al., 2016). However, if the Internet is overcensored, this might cause a chilling effect and limit free expression. For instance, Warf (2012) revealed that Internet censorship encourages the practice of self-censorship, which directly "kills" opportunities for political expression (Repnikova, 2017). Therefore, based on the theoretical discussion above, we put forward four hypotheses:

- H1: The degree of awareness of Internet laws and regulations (DAILR) will negatively predict young adults' political expression.
- H2: The degree of psychological perception of Internet censorship (DPPIC) will negatively predict young adults' political expression.
- H3: The degree of awareness of Internet laws and regulations (DAILR) will negatively predict young adults' political protest.
- H4: The degree of psychological perception of Internet censorship (DPPIC) will negatively predict young adults' political protest.

We propose the following theoretical model of Internet censorship, political expression, and political protest (Figure 1) and formulate the following research questions:

- RQ1: Does online political expression mediate the relationship between the degree of awareness of Internet laws and regulations (DAILR) and political protest?
- RQ2: Does online political expression mediate the relationship between the degree of psychological perception of Internet censorship (DPPIC) and political protest?

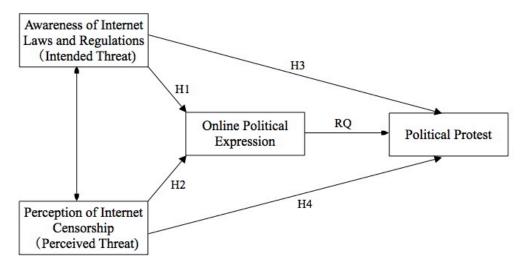


Figure 1. Theorized model of Internet censorship, online political expression, and political protest.

Method

This research employed an online survey to investigate the effects of Internet censorship on young adults' political expression and protest. The demographic sample focused on Chinese university students between the ages of 18 and 35.3 This research used a Web-based survey tool (http://www.diaochapai.net) from July 20 to September 20, 2015, and also incorporated a mixed-mode approach (e.g., using QQ, email, WeChat, mobile messages) to garner a broader sample of the relevant population. Purposive sampling surveys were sent out to 9,114 potential participants from seven cities and 15 universities, covering a wide range of regions, cities, universities, courses, grades, and classes. The sampled universities covered the eastern (Beijing, Shanghai, and Guangzhou), central (Wuhan and Zhengzhou), and western regions (Lanzhou and Xi'an; see Table 1). The survey was designed to take about 5 minutes. Participation in the survey was entirely voluntary; participants were recruited through the use of a purposive sampling approach, drawing on teachers, alumni, participants' friends, and volunteers in the target cities and school networks. Participants4 were free to withdraw from the project at any point. Their names and identifying affiliations were anonymized, and the collected data were stored on the Diaochapai website (which requires a password to access); it was agreed that all data would be deleted when the project ended. We received 2,188 responses in total, which accounted for 24% of the total surveys sent (Table 1).

Table 1. The Sampled Universities in the Study.

Area	City	University	No. of Responses
		Renmin University of China	507
	Beijing (59)	China Youth University for Political Sciences	
		Beijing Technology and Business University	
Eastern	Shanghai (35)	Shanghai Jiao Tong University	153
		Jinan University	351
	Guangzhou (27)	Sun Yat-sen University	
		Wuhan University	411
	Wuhan (32)	Huazhong Normal University	
Central		Huazhong University of Science and	
		Technology	
	Zhengzhou (20)	Zhengzhou University	154
	Vi'an (22)	Shaanxi Normal University	258
	Xi'an (32)	Xi'an Jiao Tong University	
Western		Lanzhou University	354
	Lanzhou (12)	Northwest Normal University	
		Lanzhou City University	

³ This research mainly concentrates on young people between 18 and 35 years of age, considering them to be adults who have full capacity to independently determine their own civil conduct.

⁴ Nonrespondents were individuals who either did not receive WeChat red packets or small gifts (website lottery), or missed the deadline to fill out the surveys.

Among the 2,188 survey respondents (Table 2), the number of female respondents was double that of males.

Table 2. Basic Information Regarding the Samples.

Units		Number	Percentage	Units		Number	Percentage
Gender	Male	819	37.43		East	1,011	46.21
	Female	1,369	62.57	Location	Middle	565	25.82
Han	Yes	1,905	87.07		West	612	27.97
	No	283	12.93		Three-year college	65	2.97
Chinese Communist Party	Yes	707	32.31	Education	Bachelor	1,761	80.48
	No	1,481	67.69		Above	362	16.55

The age range was 18–35 years, and the average age was 21.4 years. Of our survey participants, 62.3% reported earning the local average level of household income. The two largest groups of participants had average monthly household incomes between 5,000 and 10,000 RMB (30% of the samples) and between 2,000 and 5,000 RMB (28.6% of the samples).

Dependent Variable 1: Online Political Expression

This research draws on a study measuring online political expression in the United States (Gil de Zúñiga et al., 2014). We conducted pilot tests to gauge whether the items used in the study were fully comprehensible in the Chinese context. Respondents were asked how often during the past 12 months they had engaged in any of the following activities on SNSs, WeChat, or Weibo (1 = never, 5 = frequently): (1) friending a political advocate or politician; (2) posting or sharing information about current affairs; (3) posting or sharing photos, videos, or audio files about politics; (4) posting or sharing content or sharing opinions on current affairs; and (5) forwarding someone else's political commentary to other people. Responses to each statement were combined into a single index (M = 10.67, SD = 4.29, a = .91; Figure 2).

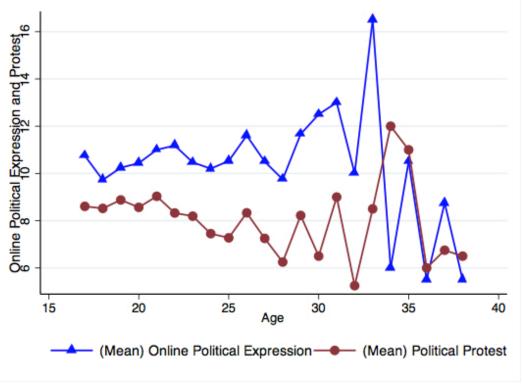


Figure 2. Young adults' online political expression and political protest.

Dependent Variable 2: Political Protest

This research draws on two scales of political participation created by Yamamoto et al. (2015) and Gil de Zúñiga et al. (2014). It develops and contextualizes four items used in China to measure both online and offline political protest. Respondents were asked how often during the past 12 months they had engaged or participated in any of the following activities (1 = never, 7 = frequently): (1) online (e.g., Weibo, WeChat) complaint or protest to a government department; (2) online (e.g., Weibo, WeChat) activities mounted by human rights networks, including signing a petition or letter; (3) offline legal political assemblies, demonstrations, or marches; and (4) offline public welfare, environmental protection, or other rights-related activities. These items were combined to create an index of political protest (M = 8.49, SD = 1.12, $\alpha = .75$; Figure 2).

In applying the theory of intended threats and perceived threats to this research, the survey focused on measuring DAILR and DPPIC, which could reflect the severity of the degree of Internet censorship.

Independent Variable 1: Degree of Awareness of Internet Laws and Regulations

To measure DAILR, the six most authoritative and influential laws and regulations were selected (Dimitrov, 2017). Respondents were asked to self-report and fill in "yes" or "no" (0 = no, 1 = yes) to identify whether they knew or had heard of the following laws and regulations: (1) the Internet real-name registration system (互联网用户账号名称管理规定), which was launched by the authorities in February 2015; (2) a judicial interpretation in September 2013 by the Supreme People's Court and the Supreme People's Procuratorate stating that citizens who forward online slander more than 500 times will be punished with jail; (3) the Regulation on Internet Information Service of the PRC (互联网信息服务管理办法), which, since September 25, 2000, has required all websites (including BBS, WeChat, and Weibo) to delete sensitive content rapidly or block key Web pages; (4) the Regulation on Internet Information Service of the PRC (互联 网信息服务管理办法), which, since September 25, 2000, has forbidden commercial websites from publishing original self-edited accounts of current affairs; (5) the requirement, since May 2015, that all websites can only forward news items posted by authorized press outlets (authorized outlets can be determined through a list (可供网站转载新闻的新闻单位名单) available from the PRC Internet Information Office); and (6) "Interview Ten" (互联网新闻信息服务单位约谈工作规定), announced in April 2015, which notes that the PRC Internet Information Office can call on the owners of websites that break the law (which includes holding a warning conversation with them) and order them to modify the websites. These items were combined to create an index of young adults' DAILR (M = 3.48, SD = 1.77, $\alpha = .70$; Table 3).

Table 3. Young Adults' DAILR.

razio di roang rianto Erizzio.							
Codes		Number	Percentage	Codes		Number	Percentage
Internet real-	No	612	27.97	Digital news writing and	No	1,129	51.60
registration system	Yes	1,576	72.03	reporting rules	Yes	1,059	48.40
Online slanderers will	No	800	36.56	Whitelist system	No	1,222	55.85
be punished in jail	Yes	1,388	63.44	William System	Yes	966	44.15
Online deletion	No	386	17.64	Interview Ten	No	1,368	62.52
system	Yes	1,802	82.36	Interview Ten	Yes	820	37.48

Independent Variable 2: Degree of Psychological Perception of Internet Censorship

DPPIC was also measured through respondents' self-evaluations according to a 5-point Likert-type scale ($1 = not\ concerned\ at\ all$, $5 = very\ concerned$). The participants were asked about the following: (1) after the implementation of real-name registration, the degree of concern they felt about protesting the government's specific regulations, which might result in punishment, and (2) when the judicial interpretation by the Supreme People's Court and the Supreme People's Procuratorate announced that citizens who forward online slander more than 500 times would be punished with jail, the degree of concern they felt about being punished when they posted or forwarded political information online. Individual scores on each item were combined to create an index of young adults' DPPIC (M = 5.87, SD = 1.89, $\alpha = .73$; Table 4).

Table 4. Young Adults' DPPIC.

rable in roung made 211201								
	Not	Not too	No	Somewhat	Very			
Codes	concerned	concerned	opinion	concerned	concerned			
	at all (%)	(%)	(%)	(%)	(%)			
After the implementation of real-								
name registration, the degree of								
concern they felt about protesting the	7.31	23.45	25.73	38.48	5.03			
government's specific regulations,	7.51	23.43	23.73	30.40	5.05			
which might result in punishment.								
After a regulation suggested online								
After a regulation suggested online slanderers would be punished with								
jail, the degree of concern they felt								
about being punished when they	11.43	34.46	23.03	27.83	3.24			
posted or forwarded political								
information online.								
information offinie.								

Control Variable

Demographic variables were the respondents' gender, age, ethnicity (race), educational background, and household income. Education was measured by asking respondents to indicate the number of years of education they had (M = 3.01, SD = 1.60), and household income was measured by average monthly household income (State Statistic Bureau, 2015) and household total income (1 = far less than the average level, 5 = far more than the average level; <math>M = 6.60, SD = 1.78).

Political antecedents were political status (party membership; *zheng zhi mian mao*; M = .31, SD = .46), political interests, and political efficacy. Political interests were measured by asking respondents how interested they were in political affairs and elections (M = 6.17, SD = 1.50, a = .79). The measure of political efficacy combined internal political efficacy (Niemi, Craig, & Mattei, 1991) and external political efficacy (Gastil & Xenos, 2010) by asking participants how much they agreed with the following statements (1 = strongly disagree, 5 = strongly agree): (1) people like me cannot figure out what the government

does; (2) I do not think I am capable of participating in political affairs; (3) I do not think people like me can influence the government; and (4) officers do not care about people like me. These four items were combined into a single index (M = 12.21, SD = 3.33, a = .80).

News media use included not only general media use but also social media use and network size. More precisely, respondents were asked to rate, using a 5-point Likert scale (1 = never, $5 = all\ the\ time$), their frequency of news media use; news media use included, but was not limited to, reading online and offline newspapers, watching network TV news, visiting well-known newspaper websites, reading articles on intellectual forums, and searching current news (Yamamoto et al., 2015). The items were combined into an index of young adults' general media following (M = 24.16, SD = 5.80, $\alpha = .80$). As for social media, respondents were asked to rate, using a 5-point Likert scale (1 = never, $5 = all\ the\ time$), the degree to which they participated in the following activities through the SNS WeChat: (1) searching current political affairs; (2) collecting local or community news; (3) accessing news from newspapers or TV; and (4) getting news from friends or family. The four items were combined into an additive index of young adults' social media WeChat use (M = 11.28, SD = 3.26, $\alpha = .84$). Regarding network size, respondents were asked to provide an estimate of the number of people during the past month with whom they had talked face to face and via the Internet (M = 4.20, SD = 1.84, $\alpha = .81$).

Statistical Analysis

This research conducted a series of hierarchical regressions. Demographic variables were first entered into regression models, followed by the political antecedent variables in the second model, and then the media use variables in the third model. The two independent variables (DAILR and DPPIC) were finally entered (Cohen & Cohen, 2003). To further test whether political expression has mediated the influence of Internet censorship on young adults' political protest, a bootstrapping test and structural equation modeling (SEM) were also employed (Preacher & Hayes, 2008; Wen, Zhang, & Hou, 2004). All data in this research were analyzed using StataSE14.0.

Findings

H1 predicted that young adults' DAILR would be negatively related to their political expression. To test this, a series of multiple regressions were conducted to control for the effects of a set of previously identified variables. In Model 1, only demographics were entered as a control block. In Model 2, political antecedents were entered as another control block, following the block of demographics. In Model 3, media use was entered as the third block. Finally, in Model 4, Internet censorship was entered as the last step. As shown in Block 4 of Table 5, this hypothesis was not supported by regression analysis. Results indicated that young adults' DAILR was significantly and positively associated with their political expression (β = .075, ρ < .001) after controlling for gender, age, education, and political antecedents. This means that young people's political expression will be more active when their DAILR is higher.

H2 stated that young adults' DPPIC would negatively predict their online political expression. To test this, the same multiple regression models were used. The regression models (see Model 4 in Table 5) show that young adults' DPPIC had a significant and negative association with their online political

expression ($\beta = -.099$, p < .001), and thus H2 was supported. The presented regression model accounts for a total variance of 37.85% for online political expression. For young adults, the higher their DPPIC, the less they participate in online activities.

Table 5. Regression Models of the Influence of Internet Censorship on Young Adults' Political Expression.

Predictors		Online	e Political Expr	Political Expression		
Predictors	Model 1	Model 2	Model 3	Model 4	SE	
Block 1: Demographics						
Age	.021	.015	.018	.017	.045	
Gender $(M = 1)$.091***	.047*	009	020	.161	
Ethnicity $(Han = 1)$.012	.014	.016	.015	.216	
Education	041	050	050	059*	.069	
Income	.083***	.053**	004	014	.040	
R ² (%)	1.56					
Block 2: Political Antecedents						
Political Status (<i>Party members</i> = 1)		.082***	.068***	.061**	.178	
Political Interests		.261***	.098***	.091***	.057	
Political Efficacy		.121***	.065***	.046*	.025	
△R ² (%)		11.68				
Block 3: Media Use						
General News Following			.290***	.260***	.014	
Social Media Use			.045*	.062***	.024	
Network Size			.381***	.379***	.044	
△R ² (%)			23.52			
Block 4: Internet Censorship Degree of Awareness of						
Internet Laws and Regulations (DAILR)				.075***	.046	
Degree of Psychological						
Perception of Internet				099***	.040	
Censorship (DPPIC)						
△R² (%)				1.46		
Total R ² (%)				38.22		
Adjusted R ² (%)				37.85		

Notes: Standardized regression coefficients (β) reported. N = 2,188. *p < .05. **p < .01. ***p < .001.

The regression models (see Block 3 in Table 5) also show that general news following (β = .260, p < .001), social media use (β = .062, p < .001), political status (party membership; β = .061, p < .01), political interests (β = .091, p < .01), and political efficacy (β = .046, p < .05) are significant predictors of online political expression, and network size is the strongest predictor of online political expression (β = .379, p < .001). This shows that young adults who are more engaged in social media use tend to express their voice politically via social media.

H3 predicted that DAILR would be negatively related to young adults' online political protest. To test this, the same hierarchical regression models were conducted. As Table 6 (see Block 4) shows, DAILR was positively and significantly related to political protest ($\beta = .043$, p < .05).

Table 6. Regression Models of the Influence of Internet Censorship on Young Adults' Political Protest.

Censorsinp on Young Addits Fontical Frotest.							
Predictors			Political Prote				
	Model 1	Model 2	Model 3	Model 4	SE		
Block 1: Demographics							
Age	.005	.001	.004	.003	.049		
Gender $(M = 1)$	008***	021	053*	062**	.178		
Ethnicity ($Han = 1$)	.036	.037	.039*	.038	.239		
Education	121***	084**	085**	091**	.077		
Income	019	033	072***	081***	.044		
R ² (%)	1.64						
Block 2: Political Antecedents							
Political Status (<i>Party</i> members = 1)		052*	063**	069**	.198		
Political Interests		.177***	.072***	.069**	.063		
Political Efficacy		.098***	.064**	.048*	.027		
∆R² (%)		5.46					
Block 3: Media Use General News Following			.167***	.146***	.016		
Social Media Use			.062**	.078***	.027		
Network Size			.248***	.248***	.048		
ΔR ² (%)			9.95				
Block 4: Internet Censorship Degree of Awareness of							
Internet Laws and Regulations (DAILR)				.043*	.051		
Degree of Psychological Perception of Internet Censorship (DPPIC)				094***	.044		
ΔR ² (%)				1.03			
Total R ² (%)				18.07			
Adjusted R ² (%)				17.58			

Notes: Standardized regression coefficients (β) reported. N = 2,188.

^{*} p < .05. ** p < .01. *** p < .001.

 $^{{\}sf H3}$ was thus rejected which demonstrates that the higher DAILR is, the more young adults engage in political protest.

In terms of H4, the results of hierarchical regression analysis (see Block 4 in Table 6) show that young adults' DPPIC was significantly and negatively associated with their political protest ($\beta = -.094$, p < .001). Thus, H4 was supported. The results indicate that as DPPIC increases, political protest decreases.

It is worth noting (see Model 4 in Table 6) that general news following (β = .146, p < .001), social media use (β = .078, p < .001), political status (party membership; β = -.069, p < .01), political interests (β = .069, p < .01), and political efficacy (β = .048, p < .05) are significant predictors of political protest. As shown in Block 3 of Table 6, network size is the strongest predictor (β = .248, p < .001) among all variables, explaining a large amount of the variance of political protest.

To address RQ1 and RQ2, bootstrapping analysis was conducted to test the possible mediation effect of online political expression. As for RQ1, the results (see Table 7) show that the indirect path between DAILR and political protest is significant (point estimate = .170, p < .001), as the 95% confidence interval (CI [.131, .210]) did not contain zero (Preacher & Hayes, 2008; Wen et al., 2004). The model indicates that DAILR impacts political protest directly and indirectly through online political expression. As for RQ2, the results (see Table 7) indicate that the indirect path between DPPIC and political protest was statistically significant (point estimate = -.051, CI [-.075, -.027]). The lack of zero in the confidence interval means that the null hypothesis can be rejected, and a mediation effect takes place (Preacher & Hayes, 2008). The model indicates that DPPIC influences political protest directly and indirectly through online political expression.

Table 7. Indirect Effects of Internet Censorship On Political Protest Through Online Political Expression.

Indirect Effects Path	β	SE	Р	95% Confidence
				Interval
DAILR → Online Political	.170	.020	.000	[.131, .210]
$Expression \to Political \; Protest$				
$DPPIC \to Online\ Political$	051	.012	.000	[075,027]
Expression → Political Protest				

Notes: Unstandardized coefficients with standard errors reported. N = 2,188. Indirect effects based on bootstrapping to 5,000 samples with biased, corrected confidence intervals. DAILR: degree of awareness of Internet laws and regulations; DPPIC: degree of psychological perception of Internet censorship.

Finally, to more stringently explore the relationship between Internet censorship, online political expression, and protest, this study implemented SEM (Figure 3) using StataSE14.0. This was based on the original proposed model (Figure 1) and modified by the hypothesis and research questions. Overall, this model fitted the data well ($\chi^2/df = 2.376$, P = 0.068, RMSEA = 0.025, CFI = 0.997, TLI = 0.978, SRMR = 0.004, CD = 0.429) and could be accepted (Hooper, Coughlan, & Mullen, 2008). As shown in Figure 3, the SEM further affirmed that DAILR and DPPIC are significant predictors of the two endogenous variables: online political expression and political protest. The dotted line (the path between DAILR and political protest) seems to be insignificant, but it does not refer to the total effect of H3. This dotted line is a direct effect of mediation analysis, which is consistent with the results of the bootstrapping analysis. This indicates that online political expression fully mediated the effects of DAILR on political protest (Wen et al., 2004).

The path between DPPIC and political protest was significant and reflected the fact that DPPIC impacts political protest directly and indirectly via online political expression. The SEM model also reveals that DAILR is negatively associated with DPPIC ($\beta = -.118$, p < .001), which implies that the higher the intended threat, the less the perceived threat.

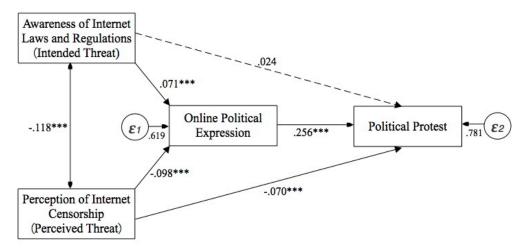


Figure 3. SEM model of Internet censorship, online political expression, and political protest.

Notes: Path entries are standardized coefficients. The effects of demographic variables (age, gender, ethnicity, education, and income); political antecedents (political interests, political status, and political efficacy); and media use (general news following, social media use, and network size) were included as control variables. Solid arrows indicate statistically significant paths at p=.05 or below. N=2,188. * p<.05. ** p<.01. *** p<.001 (two-tailed).

Discussion and Conclusion

This research examined the mechanism of Internet censorship in an authoritarian system and identified two dimensions of Internet censorship that played the roles of intended threat and perceived threat, respectively: DAILR can contribute to young adults' political protest directly or accelerate their political protest through political expression, whereas DPPIC can directly weaken political protest or indirectly limit it by curtailing young adults' political expression. Thus, the mechanism of Internet censorship acts as a symbolic means of control when it is integrated into people's routine life; it cannot fully forbid young adults' free speech and collective action. Only when Internet censorship acts as a perceived threat can it directly limit young adults' political protest. This study contributes to our understanding of one of the world's most authoritarian systems, showing that China's sophisticated Internet censorship apparatus and its attempts to restrict the freedom of online speech and people's ability to collectively mobilize are far from complete.

First, young adults' DPPIC limits their online political expression and political protest, which means that young adults who have a perception that there is a more serious degree of Internet censorship will

have a lower level of online political expression and protest. This implies that Internet censorship is negatively associated with young adults' political participation. This finding echoes earlier research, demonstrating that although the authorities allow online critique of the government, there are still serious limitations in terms of collective expressive behaviors. Internet censorship particularly aims to restrict online expression that might induce or even reinforce social mobilization (King et al., 2013). There are three potential reasons for this: (1) deletion of online posts, filtering of keywords, and punishment associated with online defamation might result in increased difficulty and cost when searching for information and communicating opinions, making it harder to engage in political protest; (2) because of fear of punishment by the authorities, citizens might prefer to practice self-censorship in order to protect themselves, and thus they might not post, forward, or comment on sensitive topics or positively participate in political protest (Repnikova, 2017; Roberts, 2014); or (3) importantly, increasing DPPIC and conducting high-profile punishments are each more effective than just regulating information dissemination (Wacker, 2003).

Second, DAILR positively predicts young adults' political expression and protest. This suggests that the higher DAILR is for young citizens, the more actively they participate in political expression and protest. Simply knowing about Internet laws and regulations does not directly decrease people's interest in political protest and expression. In particular, deleting posts and keyword filtering might entice people to explore the deleted information and inspire them to become more expressive. Roberts (2014) has suggested that increased DPPIC for bloggers and readers cannot facilitate information dissemination directly; in contrast, it might prompt them to positively look for information. This is supported by Xi (2015), who asserted that, to casual readers, explicit notice of posts being deleted will inspire more curiosity that triggers a further search on the same topic, resulting in stronger anticensorship sentiment; thus, deleting content providers' posts may not stop them from posting. When citizens disapprove of any laws or regulations they consider bad, they benefit from the Internet to express their dissatisfaction through questioning, criticism, and even protesting. In this situation, citizens are more likely to exert continuous pressure on the government when they can increase the cost of state censorship by skillfully mimicking and recontextualizing the practices of the state (Lee, 2016).

Third, online political expression mediates the effect of Internet censorship on young adults' political protests: Political expression mediates the positive effect of DAILR on young citizens' political protest and also mediates the negative effect of DPPIC on their political protest. This finding is consistent with the idea that political expression mediates the effect of Internet use in political participation (Gil de Zúñiga et al., 2014; Pingree, 2007; Price, Nir, & Cappella, 2006). This study has contextualized Internet use and focuses on how the impact of Internet censorship on political protest is mediated through online political expression, which involves two levels of processing: If Internet censorship has an initial effect on online political expression, then online political expression could affect political protest accordingly. On the one hand, young adults' DAILR motivates online political expression, and their DPPIC limits their will to engage in online political expression; on the other hand, individuals who are more active in their own online political expression will also be more enthusiastic in searching for and understanding political information, which helps them to mobilize others and themselves to conduct more offline activities (Elin, 2003).

Fourth, young adults' DAILR is negatively related to their perception of Internet censorship (DPPIC). Along with having an increasing DAILR, they are becoming more familiar with the boundaries of the law, as

well as their own legal rights, which leads to their political expression and related behaviors becoming more objective and legal. In addition, with the increasing transparency of laws and regulations, it is now clearer to citizens what is prohibited and what will elicit punishment, which helps them to minimize their fears of suffering unwarranted punishment.

Finally, Internet censorship is not the most critical factor affecting young adults' political protest. In addition to DAILR and DPPIC, other factors, such as media use and political antecedents, also directly affect their frequency of political protest. Accordingly, this study found media use to be the strongest predictor of political expression and protest, with the second strongest variable being political antecedents, and the third and fourth strongest predictors being demographics and network size. It is noteworthy that young adults who are female, less educated, and of lower income are more likely to actively participate in political protest than young males who have a better education and income; young adults who are better educated generally participate less in online political expression.

Limitations and Suggestions

There are three potential limitations in this research. First, when evaluating the effect of Internet censorship on political protest, the survey questions in this research mainly focused on general, rather than unconventional, Internet censorship. For instance, this research did not analyze the degree of influence of network-special governance action or Internet regulation on emergency response, which might indicate an insufficiently comprehensive examination of structure threats.

Second, some activities were neglected in measuring political protest, including public petitions, strikes, demolition, boycott of goods, and illegal demonstrations. In addition, this research did not divide political protest into individual or collective types or consider whether it was low cost or high risk (McAdam, 1986). Moreover, "interpersonal discussion offline" should be included in the measurement of political expression (Eveland, 2004; Lo et al., 2017), and its omission limits the final results.

Third, this research did not cover rural groups of young adults, nor did it fully consider that given the high censored environment of China, the online survey might have been affected by structural threats. Both the respondents who filled out the surveys and the individuals who refused to participate might have been affected by structural threats, which might have led to a skewing effect.

However, these limitations also provide potential opportunities that could be addressed in future studies: It would be beneficial for such studies to include illegal political demonstrations, interpersonal communication offline, and Internet emergency governance (general and unconventional methods of governance), thereby enhancing the scales used to measure political expression and protest. Additionally, it is suggested that future research should compare the effects of Internet censorship on different groups—for instance, young adults, the middle aged, and the elderly—in addition to examining their political orientations and cultural dimensions (Taneja & Wu, 2014), to further contribute to the study of the effects of Internet censorship on citizens' protests.

References

- Abigail, A. (2011). How activists "Take Zapatismo Home": South-to-North dynamics in transnational social movements. *Latin American Perspectives*, *38*(1), 138–152.
- Asch, S. (1952). Social psychology. New York, NY: Prentice Hall.
- Bianco, L., & Hua, C. M. (2009). Wretched rebels: Rural disturbances on the eve of the Chinese Revolution. Cambridge, MA: Harvard University Asia Center.
- boyd, d. m., & Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, *13*, 210–230.
- Boyle, M. P., Schmierbach, M., Armstrong, C. L., Cho, J., McCluskey, M., McLeod, D. M., & Shah, D. V. (2006). Expressive responses to news stories about extremist groups: A framing experiment. *Journal of Communication*, 56(2), 271–288.
- Carolina, M. (2017). New Brazilian feminisms and online networks: Cyberfeminism, protest and the female 'Arab Spring.' *International Sociology*, *32*(2), 417–434.
- Chen, M., Wu, X., Hao, Y., & Xi, R. (2012). Microblogging, online expression, and political efficacy among young Chinese citizens: The moderating role of information and entertainment needs in the use of Weibo. *Cyberpsychology, Behavior and Social Networking*, *15*(7), 345–349.
- Cohen, J., & Cohen, P. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Couldry, N. (2015). The myth of us: Digital networks, political change and the production of collectivity. Information, Communication & Society, 18(6), 608–626.
- Creemers, R. (2017). Cyber China: Upgrading propaganda, public opinion work and social management for the twenty-first century. *Journal of Contemporary China*, 26(103), 85–100.
- Dai, C. Z. (2010). Political science [in Chinese]. Beijing, China: Publishing House of University of International Business and Economics.
- De Wall, A. (2003). Why the HIV/AIDS pandemic is a structural threat to Africa's governance and economic development. *Fletcher Forum of World Affairs*, 27(2), 6–24.
- Dimitrov, M. (2017). The political logic of media control in China. *Problems of Post-Communism*, 64(3–4), 121–127.
- Douglas, L. (1998). Federalism as a structural threat to liberty. *Harvard Journal of Law & Public Policy*, 22(1), 67–83.

- Elin, L. (2003). The radicalization of Zeke Spier: How the Internet contributes to civic engagement and new forms of social capital. In M. McCarthy & M. D. Ayers (Eds.), *Cyberactivism: Online activism in theory and practice* (pp. 97–114). New York, NY: Routledge.
- Ellison, N. B., & boyd, d. m. (2013). Sociality through social network sites. In W. H. Dutton (Ed.), *The Oxford handbook of Internet studies* (pp. 1–26). Oxford, UK: Oxford University Press.
- Eveland, W. P. (2004). The effect of political discussion in producing informed citizens: The roles of information, motivation, and elaboration. *Political Communication*, *21*(2), 177–193.
- Gao, L. (2016). The emergence of the Human Flesh Search Engine and political protest in China: Exploring the Internet and online collective action. *Media, Culture & Society*, *38*(3), 349–364.
- Gastil, J., & Xenos, M. (2010). Of attitudes and engagement: Clarifying the reciprocal relationship between civic attitudes and political participation. *Journal of Communication*, 60(2), 318–343.
- Gil de Zúñiga, G. H., Molyneux, L., & Zheng, P. (2014). Social media, political expression, and political participation: Panel analysis of lagged and concurrent relationships. *Journal of Communication*, 64(4), 612–634.
- Greitens, S. C. (2013). Authoritarianism online: What can we learn from Internet data in nondemocracies? *PS: Political Science & Politics*, 46(2), 262–270.
- Ha, H. y., John, J., John, J. D., & Chung, Y. K. (2016). Temporal effects of information from social networks on online behavior: The role of cognitive and affective trust. *Internet Research*, 26(1), 213–235.
- Hachigian, N. (2001). China's cyber-strategy. Foreign Affairs, 80(2), 118–136.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, *6*(1), 53–60.
- Hu, R. (2015). Chinese people's political efficacy, political participation and political trust [in Chinese]. Sociological Study, 11, 76–96.
- Hu, Y. (2010). China's regulation of the Internet [in Chinese]. *Mass Communication Research*, 4, 261–287.
- Hyun, K. D., & Kim, J. (2015). The role of new media in sustaining the status quo: Online political expression, nationalism, and system support in China. *Information, Communication & Society*, 18(7), 766–781.

- King, G., Pan, J., & Margaret, R (2013). How censorship in China allows government criticism but silences collective expression. *American Political Science Review*, *107*(2), 326–343.
- Kushin, M. J., & Yamamoto, M. (2010). Did social media really matter? College students' use of online media and political decision making in the 2008 election. *Mass Communication and Society*, 13(5), 608–630.
- Lawrence, R., & Boydstun, A. E. (2017). What we should really be asking about media attention to Trump. *Political Communication*, *34*(1), 150–153.
- Lee, S. Y. (2016). Surviving online censorship in China: Three satirical tactics and their impact. *China Quarterly*, 228, 1061–1080.
- Lilleker, D. G., & Koc-Michalska, K. (2017). What drives political participation? Motivations and mobilization in a digital age. *Journal of Political Communication*, *34*(1), 21–43.
- Lo, V. H., Wei, R., & Lu, H. Y. (2017). Issue importance, third-person effects of protest news, and participation in Taiwan's Sunflower Movement. *Journalism & Mass Communication Quarterly*, 94(3), 1–21.
- Lu, J. Y. (2016). Impact of social media and mobile app use for news on youths' political protest [in Chinese]. *Modern Communication*, *5*, 48–54.
- Lu, J. Y. (2018, forthcoming). The impact of social media on political participation, and moderation effects of government monitoring in China [in Chinese]. *Chinese Journal of Journalism & Communication*, 11(45),
- McAdam, D. (1986). Recruitment to high-risk activism: The case of Freedom Summer. *American Journal of Sociology*, 92(1), 64–90
- Milburn, W. T., & Watman, H. K. (1981). On the nature of threat: A social psychological analysis. New York, NY: Praeger.
- Niemi, R. G., Craig, S. C. & Mattei, F. (1991). Measuring internal political efficacy in the 1988 National Election Study. *American Political Science Review*, 85(4), 1407–1413.
- Pingree, R. J. (2007). How messages affect their senders: A more general model of message effects and implications for deliberation. *Communication Theory*, *17*(4), 439–461.
- Powell, L., & Cowart, J. (2015). *Political campaign communication: Inside and out*. London, UK: Routledge.

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Price, V., Nir, L., & Cappella, J. N. (2006). Normative and informational influences in online political discussions. *Communication Theory*, *16*(1), 47–74.
- Repnikova, M. (2017). Media openings and political transitions: Glasnost versus Yulun Jiandu. *Problems of Post-Communism*, 64(3–4), 141–151.
- Roberts, M. E. (2014). Fear or friction? How censorship slows the spread of information in the digital age.

 Retrieved from

 https://pdfs.semanticscholar.org/f10f/d77e13c31c75ba4c4290ad89582f04aab266.pdf
- Shirk, S. L. (2011). Changing media, changing China. New York, NY: Oxford University Press.
- State Statistic Bureau. (2015). PRC's national economic and social development statistical bulletin [in Chinese]. *Chinese Statistics*, 3, 6–14.
- Taneja, H., & Wu, A. X. (2014). Does the Great Firewall really isolate the Chinese? Integrating access blockage with cultural factors to explain Web user behavior. *Information Society*, *30*(5), 297–309.
- Tsatsou, P., & Zhao, Y. P. (2016). A "two-level social capital analysis" of the role of online communication in civic activism: Lessons from the role of Facebook in the Sunflower Movement. *Social Media + Society*, 2(4), 1–16.
- Wacker, G. (2003). The Internet and censorship in China. In C. R. Hughes & G. Wacker (Eds.), *China and the Internet: Politics of the digital leap forward* (pp. 58–82). London, UK: Routledge.
- Wang, S. I. (2007). Political use of the Internet, political attitudes and political participation. *Asian Journal of Communication*, 17(4), 381–395. doi:10.1080/01292980701636993
- Wang, X. (2009). *Behind the great firewall: The Internet and democratization in China* (Unpublished doctoral dissertation). University of Michigan, Ann Arbor.
- Warf, B. (2012). Global geographies of the Internet. New York, NY: Springer.
- Wen, Z., Zhang, L., & Hou, J. T. (2004). Testing and application of the mediating effects [in Chinese]. Acta Psychologica Sinica, 36(5), 614–620.
- Witte, K., & Morrison, K. (2000). Examining the influence of trait anxiety/repression-sensitization on individuals' reactions to fear appeals. *Western Journal of Communication*, 64(1), 1–27.

- Xi, A. (2015). Quiet censorship [in Chinese]. Retrieved from http://chuansong.me/n/1158935
- Xiao, Q. (2011). The battle for the Chinese Internet. Journal of Democracy, 22(2), 47-61.
- Xiong, Y. (2014). Can penalties inhibit rumor transmission? A case study on "having more than 500 retweets can land you in jail" [in Chinese]. *Journalism and Communication*, 2, 22–34.
- Yamamoto, M., Kushin, M. J., & Dalisay, F. (2015). Social media and mobiles as political mobilization forces for young adults: Examining the moderating role of online political expression in political participation. *New Media & Society*, *17*(6), 880–898.
- Yu, H. (2009). Media and cultural transformation in China. London, UK: Routledge.
- Zhang, K. (2010). *Political communication and historical thinking* [in Chinese]. Wuhan, China: Huazhong University of Science and Technology Press.
- Ziccardi, G. (2013). *Resistance, liberation technology and human rights in the digital age*. London, UK: Springer.