



Received: 07 March 2018
Accepted: 25 May 2018
First Published: 04 June 2018

*Corresponding author: Hongyu Wang, Sociology Department, University of Macau (UM), Avenida da Universidade, Taipa, Macau, China
E-mail: Hwang@umac.mo

Reviewing editor:
Guangchao Charles Feng, Shenzhen University, China

Additional information is available at the end of the article

MEDIA & COMMUNICATION STUDIES | RESEARCH ARTICLE

Media exposure and Chinese college students' attitudes toward China's maritime claims and disputes in the South and East China Seas

Hongyu Wang^{1*} and Tianji Cai¹

Abstract: China's growing assertiveness in dealing with maritime territorial disputes has significant ramifications for regional peace and stability. Chinese government has been increasingly responsive to public opinion when making foreign policy. Media in China may play an important role in guiding public opinion and influencing the direction of China's foreign policy. This study uses the survey method to compare the effect of differential media exposure on Chinese college students' attitudes toward China's maritime claims and disputes in the South and East China Seas. We find that intentional news exposure on China's state media, commercial media, and online news outlets exerts no effect on Chinese college students' attitudes toward China's foreign policy. By contrast, incidental news exposure on WeChat (a relationship-oriented social media network) plays a larger role in increasing Chinese college students' support for the forceful resolution of maritime disputes than Weibo (a news media site), when students communicate in a homogeneous environment. Moreover, cross-cutting exposure on Weibo is conducive to the development of moderate, reasoned, and open-minded opinions on China's foreign relations, but students cannot reap the same benefits of cross-cutting exposure on WeChat. These findings support both the selective exposure hypothesis (intentional exposure) and the large media effect model (incidental exposure). We

ABOUT THE AUTHORS

Hongyu Wang is an associate professor in the Sociology Department, University of Macau. Her research interests include the study of associational participation, social networking use, and political participation in contemporary China. She has published her work in a number of scholarly journals, including *American Journal of Sociology*, *Information, Communication & Society*, *Chinese Sociological Review*, and *Social Science Research*.

Tianji Cai is an assistant professor of sociology at the University of Macau. His research focuses on quantitative research methods, especially the issues of sampling weights in multilevel and longitudinal models. In addition, he is also interested in integrating genetics and sociology in the studies of social and health behaviors.

PUBLIC INTEREST STATEMENT

Politicians use public opinion to guide their policy making and the media plays an important role in shaping public opinion and guiding policy making in China. In this study, we examine the relationship between media uses and Chinese college students' attitudes toward China's maritime claims and disputes in the South and East China Seas. We find that China's official, commercial, and online news outlets do not have the capacity to manipulate public opinion to suit its quest for regional and global stability. In contrast, when students stumble upon news on social media such as WeChat (relationship oriented) and Weibo (information oriented), they are more likely to push government to take hawkish foreign policy positions if they communicate with other like-minded people; they are more inclined to support a mild approach toward maritime territorial disputes when they are exposed to different points of view on Weibo but not on WeChat.

contribute to the literature by emphasizing the importance of differentiating media exposure mode, media content, and the relationship structure of social media when studying media effects on public opinion formation.

Subjects: Communication Studies; Mass Communication; Political Communication

Keywords: media exposure; WeChat & Weibo; intentional media exposure; incidental media exposure; cross-cutting media exposure; China's maritime claims and disputes

1. Introduction

China's rapid economic growth has substantially increased its military capacity and led to its full-blown quest for global leadership in recent years. As a result, Chinese leaders have become increasingly confident in their ability to handle international affairs and settle territorial disputes on their own terms (Zhao, 2013). A rising China is resistant to American intervention or leadership in Asia and strives to build a new regional order, with China as the center of economic and political development in Asia. More notably, the Chinese government has expanded the list of its core interests to include its maritime claims and disputes in the South and East China Seas. China's growing assertiveness in international politics has caused tremendous anxiety for Western powers and its Asian neighbors, both of which are concerned that the rise of Chinese populist nationalism will drive Chinese foreign policy in a more assertive or even aggressive direction and make compromise extremely difficult, if not impossible (Zhao, 2013). It is no exaggeration that China's policies on maritime claims and disputes in the South and East China Seas have significant ramifications for regional peace and development. The Chinese government is increasingly responsive to public opinion in policy making, and media plays an extremely important role in guiding public opinion. Thus, it is important to assess the extent of public support for the use of military force to defend China's sovereignty and territorial integrity and the role of media in fueling populist nationalism in China.

People mostly rely on mass media to inform them of issues they have no direct knowledge about or experience with, and thus all kinds of media are assumed to exert profound persuasive effects on public opinion on key issues remote from people's everyday lives (Denemark & Chubb, 2016; Mutz & Young, 2011). Not all scholars agree that media is the driving force of public opinion though. Proponents of the selective exposure theory argue that media exerts little or no effect on public opinion formation, simply because it is people's political beliefs that guide their media choice rather than media exposure that shapes one's political attitudes. The cognitive dissonance theory argues that people prefer attitude-consistent over counter-attitudinal information simply because exposure to opposing views increases psychological discomfort associated with uncertainty and exposure to agreeable information reinforces their pre-existing views (Stroud, 2008). People with strong political predispositions are more likely to engage in intentional exposure to like-minded media for cognitive consistency (Garrett, 2009; Stroud, 2008) and less receptive to media content that contradicts their predispositions. Exposure to unwelcome information sometimes can produce a strong backfire effect among those who hold strong opinion on certain issues. By contrast, supporters of large media effects argue that selective exposure may occur less often than previous assumed, given that most people do not hold strong political predispositions (Entman, 1989); gather news from major news outlets with good reputations and credibility, regardless of their political leanings; or are incidentally exposed, from the prevalence of social media (Lee, 2015), to information that does not conform to their pre-existing beliefs. Before we address the relationship between media exposure and public opinion, a brief description of China's media landscape is in order.

2. Literature review and hypotheses

2.1. China's media environment

Before China began its media reform in the 1990s, state-owned mass media, controlled financially and editorially by the government, was the primary source of domestic and

international news in China (Lu, 2013; Lu, Aldrich, & Shi, 2014; Shi, Lu, & Aldrich, 2011). Relying on hegemonic power, the Chinese government effectively monitored media coverage to ensure that it conformed to its official stance on various issues, and as a result, media content on state media was monolithic and homogeneous (Hyun & Kim, 2015; Lu et al., 2014; Shi et al., 2011). China's media landscape has become progressively diversified and commercialized as a result of China's media reform since the early 1990s. The rise of commercial media and social media and the limited access to Western media have substantially changed the way people become informed about international affairs in China (Wohn & Bowe, 2016). More notably, the enormous reach and penetration of social media has transformed the way information is produced, disseminated, and consumed in China, and for the first time, Chinese netizens are exposed to information and opinions that differ from those of official accounts. In addition, Chinese netizens often encounter domestic and international affairs incidentally while habitually using social media such as Weibo and WeChat (Kim, Chen, & Gil de Zúñiga, 2013). In the following section, we discuss in detail how differential exposure to state-owned media, commercial media, Western media, and social media may strengthen or weaken public support for the use of military force to resolve China's maritime claims and disputes in the South and East China Seas.

2.2. Intentional news exposure on traditional media and public opinion formation

Traditional media differs from social media in many ways. The consumption of traditional mass media is a top-down, sender-driven, one-way communication experience (Weeks & Holbert, 2013). Readers have no control over or influence on the production of media coverage; rather, they depend solely on gatekeepers (editors and professional journalists) to determine whether and what information is released. News sharing in traditional media is also difficult, if not impossible, given that it is more troublesome to share newspaper clippings than simply clicking the "like" button on the Internet (Weeks & Holbert, 2013). Moreover, traditional news media consumption is generally considered purposive or goal-directed behavior, in that readers actively seek out news that is consistent with their pre-existing attitudes and beliefs or catches their attention (Kim, 2011; Stroud, 2008). For example, pro-government Chinese citizens who are supportive of their government's mild foreign policy approach are more likely to turn to international news from the state-owned mass media, and such exposure may further reinforce their stance toward using diplomatic and peaceful means to resolve China's maritime claims and disputes.

State-owned media content differs substantially from social media content. Propaganda and persuasion are crucial for maintaining an authoritarian regime, and the Chinese government promotes official nationalism through a routine emphasis on national unity and national pride in news reporting on state-owned mass media (Hyun & Kim, 2015; Shen & Guo, 2013). Chinese official nationalism differs greatly from the unruly populist nationalism, which urges the government to adopt a more hawkish approach to Western hegemony in Asia. Pragmatic Chinese leaders believe that it is in China's best interest to avoid any direct confrontation with other major powers, given that the success of China's economic modernization depends heavily on its peaceful integration with world economics and its cooperation with Western powers (Zhao, 2013). To ensure that the aggressive nationalist sentiment does not jeopardize China's overarching goals of economic modernization and political stability, the Chinese government strives mightily to co-opt and subsume populist nationalism in line with its national goals (Hyun, Kim, & Sun, 2014). As a result, state-owned media often tones down or even completely avoids reporting nationalist activities triggered by key incidents involving China in diplomatic conflicts with Western powers, especially when these are perceived as posing a direct challenge to the Chinese Communist Party's legitimacy (Hyun et al., 2014). In addition, official media in China has been quite successful in building a positive image of China's peaceful development, with the aim to create a friendly international environment for its ascendancy. Selective exposure theory argues that state media functions as an echo chamber where pro-government stance is reaffirmed. In other words, intentional exposure to state media reinforces students' mild stances toward foreign policy. Therefore, we generate the following hypothesis:

H1a: Seeking international news from China's state-owned mass media significantly reduces Chinese college students' support for the use of military force to resolve China's maritime claims and disputes in the South and East China Seas. In addition to state-owned media, Chinese college students seek international news from different types of commercial media that are less controlled and enjoy wide latitude in their coverage of domestic and international news (Denemark & Chubb, 2016). Unlike state-owned media, China's commercial media take a nationalist slant in their international news reporting (Denemark & Chubb, 2016). They continue to push the limits of political reporting in authoritarian China by using acerbic headlines or even jingoistic language to fuel populist nationalism in China. Their distinctive, sensational reporting styles and perceived distance from the state have attracted a large liberal-minded audience in China (Denemark & Chubb, 2016; Shirk, 2011). Thus, we generate the following hypothesis:

H1b: Seeking international news from China's commercial media significantly increases Chinese college students' support for the use military force to resolve China's maritime claims and disputes in the South and East China Seas.

Furthermore, Chinese citizens have limited access to Western media, such as CNN and BBC. To our knowledge, no study has examined the relationship between Western media exposure and public opinion formation in China. As a result, we conduct content analysis of Western media reports on China's maritime claims and disputes to understand their perspectives on key international conflicts involving China. We collected relevant news reports from CNN and BBS in the 2015–2016 period, during which we also collected our survey data. The results of the content analysis show that Western countries, including the United States and Britain, generally do not recognize China's maritime claims in the South and East China Seas; instead, during this time, they were expressing concerns with China's expansionist expeditions in this area. Specifically, Western societies firmly reiterated that the "nine-dash line" did not represent China's historical or legal claims in the South China Sea and manmade islands did not confer rights over territorial seas or airspace under international law. The Western media advocated that all involved sides resolve maritime claims and disputes through multilateral diplomatic negotiations, urging China to halt the island-building projects and to maintain the status quo in the South and East China Seas. Western media were particularly worried about the sovereignty disputes over the Diaoyu/Senkaku islands and warned repeatedly that any misstep by either party might disrupt regional security and stability. In light of the results of the content analysis, we generate the following hypothesis:

H1c: Seeking international news from Western media significantly reduces Chinese college students' support for the use of military force to resolve China's maritime claims and disputes in the South and East China Seas.

2.3. Incidental news exposure on social media and public opinion formation

The rise of the Internet has significantly changed the way Chinese citizens gather information, interact with each other, and participate in politics in contemporary China (Wang, Cai, Mou, & Shi, 2017; Wang & Shi, 2018). This is particularly true for youth who rely on the Internet as their primary source of domestic and international news (Gil de Zúñiga, Weeks, & Ardèvol-Abreu, 2017; Pentina & Tarafdar, 2014). Netizens can intentionally seek news from online news websites or stumble on news while using social media for other purposes (Gil de Zúñiga et al., 2017). The information available on online news websites varies only slightly from media content covered by state-owned and commercial media (Denemark & Chubb, 2016), and thus we do not generate hypotheses for intentional exposure to news on the Internet. Our aim in this research is to investigate whether and how incidental exposure to political information on social media influences public opinion formation in contemporary China.

Social media differs greatly from traditional mass media in shaping public opinion in three ways. First, social media networking sites such as Weibo and WeChat have given many Chinese citizen journalists a voice they never had before, and the content created by grassroots reporting has become a valuable alternative source of domestic and international news in China (Wang & Shi,

2018). Moreover, social media has become the single most important platform for Chinese netizens to give vent to nationalist sentiment (Hyun et al., 2014; Zhao, 2013). The Chinese government tolerates, and sometimes even encourages, the overt and explicit expression of animosity and belligerence against Western powers on social media, especially when these nations became involved in diplomatic conflicts or territorial disputes with China (Hyun & Kim, 2015). As a result, social media has become not only a fertile breeding ground for populist nationalism but also epicenters of nationalist initiatives and reactions that have empowered Chinese nationalists to channel their nationalist fervor into online activism (Hyun & Kim, 2015; Hyun et al., 2014). With this newfound power enabled by social media, Chinese nationalists played an important role in urging the Chinese government to adopt a rather hawkish foreign policy to forcefully defend China's national interests (Hyun et al., 2014; Zhao, 2013).

Second, Chinese netizens generate hundreds of thousands of new posts every day (Esarey & Xiao, 2011), and the availability of such a large amount of user-generated content on social media has made it difficult, if not impossible, for the government to implement censorship in a timely manner (Shirk, 2011; Wang & Gu, 2016; Yuan, 2011). Consequently, social media in China remains relatively free from government surveillance and has become a rare channel of uncensored information in China's tightly controlled media environment (Wei, Lo, Xu, Chen, & Zhang, 2014). Because of its speed and ease of posting news without interference from gatekeepers, such as journalists or editors, social media is usually the first place where breaking news appears (Shirk, 2011).

Third, social media differs from traditional media not only in media content but also in exposure mode. The rise of social media has facilitated incidental news exposure because such information is often "pushed" to users by their friends, family members, and other acquaintances (Bode, 2016a; Fletcher & Nielsen, 2017; Gil de Zúñiga et al., 2017; Weeks, Lane, Kim, Lee, & Kwak, 2017; Wohn & Bowe, 2016). Incidental exposure to online news is most likely to happen in non-political spaces (Kim et al., 2013) and has become the primary way people, especially the politically uninterested, stay informed about politics (Tewksbury, Weaver, & Maddex, 2001). Many people sign up on Weibo or WeChat primarily for non-political reasons, but they are still repeatedly exposed to political information posted by their friends as by-products of other non-political activities, especially during a highly politicized time (Wohn & Bowe, 2016). What content users are exposed to be determined by who their friends are and what information their friends share on social media (Bode, 2016a; Wells & Thorson, 2017). Because incidental news exposure can reach the politically uninterested, it may close knowledge gaps between these groups and the politically interested (Fletcher & Nielsen, 2017; Valeriani & Vaccari, 2016; Wells & Thorson, 2017). Those who take no interest in politics can become knowledgeable about politics if they are connected with someone who is highly interested in public affairs (Valeriani & Vaccari, 2016). Thus, incidental news exposure can substantially expand the size of the attentive public by reaching the politically uninterested, especially in times of diplomatic crises (Baum, 2002). Consistent with this discussion, we generate the following hypothesis:

H2a: Incidental exposure to international news on social media such as Weibo and WeChat significantly increases Chinese college students' support for the use of military force to resolve maritime claims and disputes in the South and East China Seas.

Incidental news exposure on social media not only enhances political learning for the politically uninterested but also makes it more difficult for netizens to avoid counter-attitudinal political information (Fletcher & Nielsen, 2017; Heatherly, Lu, & Lee, 2017; Weeks et al., 2017). Social boundaries appear to be weakened on social media, resulting in social networks that provide diversified and cross-cutting perspectives on both domestic and international issues (Kim, 2011). Many people choose to connect with friends, colleagues, classmates, family members, and public figures for non-political reasons, such as common interests or hobbies, and consequently, many friendships cut across ideological affiliations on social media. Individuals can remove a friend if they do not like his or her posts, but few people unfollow friends simply because they disagree with

them politically (Bode, 2016a, 2016b). Although exposure to opposing views can cause cognitive dissonance, many people still feel compelled to keep those friends for social reasons, thus continuing their exposure to cross-cutting views on social media (Bode, 2016b). More notably, people are more likely to be exposed to cross-cutting political views online than offline. Chinese people feel less comfortable expressing their different views in face-to-face situations, given that a circular and respectful communication style is preferred to direct confrontation in Chinese culture and people are more amenable to responding to the norms of politeness and social pressure to maintain harmony in offline social settings (Scheufele, 1999). Relationship-oriented social networks such as WeChat tend to map closely onto people's offline ones, but the absence of physical cues on WeChat encourages users to adopt a direct Western communication style and express their differences freely and comfortably on the Internet (Wang & Gu, 2016).

Citizen journalism broadens netizens' horizons by spreading opposing, not just diversified, information that is not available on traditional media (Kaufhold, Valenzuela, & Gil de Zúñiga, 2010). The power of social media to bring more diversity to political communication is deemed politically revolutionary in authoritarian regimes because it shatters information monopoly by the state and leads to the emergence of "ideational pluralism". Exposure to cross-cutting perspectives may play a significant role in preventing or reducing the emergence of extreme attitudes toward China's foreign policy, given that understanding the rationale behind the opposing views is essential for people to modify their own views (Price, Cappella, & Nir, 2002). People become more politically knowledgeable and more tolerant when exposed to diverse and cross-cutting perspectives (Mutz, 2002), especially those who have a positive orientation toward conflict (Testa, Hibbing, & Ritchie, 2014). Incidental exposure to political differences also enables people to think more broadly and to form moderate, reasoned, and open-minded opinions on international politics (Mutz, 2002). Social media users who incidentally encounter counter-attitudinal political information socially endorsed by their friends and family members are even more likely to set their pre-existing political views aside and interpret those opposing views objectively (Messing & Westwood, 2014). This discussion leads us to posit the following:

H2b: Exposure to political differences on Weibo and WeChat significantly decreases Chinese college students' support for the use of military force to resolve China's maritime claims and disputes in the South and East China Seas.

Weibo and WeChat are the most popular and influential social networking sites in China, and to our knowledge, no study has compared the relative impact of Weibo and WeChat on public opinion formation in China. Weibo and WeChat provide different features and functionalities, and people use them for different purposes. We argue that Weibo may play a far less important role than WeChat in influencing public opinion for several reasons. Weibo is a public network for information sharing, and everyone who has a Weibo account can become a "broadcast channel". Weibo as a news media is mainly used for information generation, distribution, and consumption, but it does not guarantee that people can get more information from it. Weibo is indisputably better than WeChat in spreading a large amount of information to a massive audience more quickly, due to its open and public nature (Stockmann & Luo, 2017). Unsurprisingly, Weibo users are often overwhelmed with large amounts of information posted by mostly anonymous strangers. In an age of information explosion, an overwhelming amount of information competes for people's attention; thus, it is attention, but not information, that has become a scarce cognitive resource (Choi, 2014). Because attention is a finite resource and people can only pay attention to a limited amount of information at a given time, they rely on others, especially those they know, to identify useful and valuable information for them (Bode, 2016a). Weibo users usually do not know one another, and thus they do not have people who can filter the information for them, resulting in a bulk of information going unread on Weibo (Choi, 2014). Weibo users are also less likely to develop a sense of belonging, which plays a significant role in attitude formation, because of the lack of group structure on Weibo (Stockmann & Luo, 2017).

WeChat, the most popular instant messenger with the largest user base in China, is relationship oriented and designed to facilitate users' regular contact with family members, friends, classmates, colleagues, and other acquaintances (Stockmann & Luo, 2017). The information circulating on WeChat is mostly sent by known others, given that WeChat is mainly used for relationship maintenance (Stockmann & Luo, 2017). Friends and acquaintances act as natural filters, identifying and selecting useful and valuable information to overcome information overload (Pentina & Tarafdar, 2014). These highly personalized recommendations have proved more effective in guiding users to read specific content or information than generic recommendations based on the most read or widely circulated stories of the day (Mutz & Young, 2011). More important, one of the main reasons people use WeChat is to maintain close social ties to others; therefore, they pay close attention to what their friends share on WeChat for reasons that go beyond a genuine interest in the content (Mutz & Young, 2011).

Because WeChat groups are ideal for animating small online communities connected by common interests, the Chinese government implements less restrictive censorship on this site under the assumption that small groups exert little or no political influence, which in turn gives WeChat users more latitude in freely expressing their views and opinions (Stockmann & Luo, 2017). More notably, the in-group design of WeChat provides better privacy and security than other social media networking sites, including Weibo, by allowing users to create their own target audience (Wang & Gu, 2016). For example, its "moments" facilitates broadcasting information only to people on users' friends list, and users can only see comments posted by those they are directly connected with on WeChat. Such a technological design enables users to share sensitive political information within a small private circle of handpicked friends (Wang & Gu, 2016). Another advantage of such a privacy design is that it is nearly impossible to trace a post to its origins, so there is no way to identify and punish original posters (Wang & Gu, 2016). This newfound sense of privacy and security on WeChat encourages users to discuss and spread politically sensitive domestic and international news freely within their private circles (Wang & Gu, 2016). Thus, the rise of WeChat as a communication platform is history in the making, in terms of expanding freedom of speech and information sharing in contemporary China. Thus, we generate the following hypotheses:

H3: WeChat plays a larger role in shaping public opinions on China's foreign policy than Weibo.

3. Methodology

3.1. Sample

We conducted a paper-and-pencil survey with 12 randomly selected departments at a large public university in Southern China in 2016. All selected departments agreed to participate in the survey. Informed consent was solicited before questionnaire administration, and respondents were assured of confidentiality and anonymity before answering the questionnaire during class time in the presence of trained research assistants. Students were assured that all paper copies of questionnaires would be shredded after the generation of an anonymous data file, to prevent or reduce social desirability bias or fear-driven response bias. The final sample size consisted of 650 college students. College students represent the future elites of Chinese society, and their attitudes toward China's maritime claims and disputes have significant implications for China's foreign policy and regional and international stability. A systematic examination of exposure to traditional mass media and social media helps shed light on the impact of media exposure on public opinion formation in contemporary China.

3.2. Measurement

3.2.1. *Dependent and key independent variables*

Chinese college students' extent of support for China's claims in the South China Sea and the extent of their support for using military force to resolve maritime dispute over the Diaoyu/Senkaku

islands are our dependent variables. On a 4-point scale, students were asked the extent to which they agree with the following statements: “China has indisputable sovereignty over South China Sea islands, and foreign nations have no rights to interfere” and “China has indisputable sovereignty over the Diaoyu Islands, and we should use military force to resolve disputes if necessary”.

Our key independent variables capture the media usage patterns of Chinese college students. Media usage in mainland China can be categorized into five groups: intentional exposure to state media news (e.g., *People’s Daily*, *Global Times*, domestic television news programs), commercial media news (e.g., *Xinmin Evening News*, *Shanghai Morning Post*, *Southern Weekly*), Western media (e.g., CNN, BBC), online news websites (e.g., The Paper, Sohu News, Tencent News), and incidental exposure to social media (e.g., Weibo, WeChat). We used two questions to measure different dimensions of incidental exposure to international news on social media. First, students were asked to report the frequency with which they stumble upon political news or information related to China’s maritime claims and disputes in the South and East China Seas in Weibo and WeChat, respectively. Second, students were asked to report their perceptions of the degree of political disagreement on Weibo and WeChat regarding people’s attitudes toward China’s foreign policy, respectively. There is little agreement in the literature on how to conceptualize and operationalize political disagreement, so we adopt the measure used by Eveland and Hively (2009) to assess users’ perceptions of the opinion climate within their social networks—whether the majority of their social media connections agree (i.e., share the same views) or disagree with one another, regardless of their own attitudes. We code those who report that they are exposed to ideologically diverse views and opinions on Weibo and WeChat as 1 and those who report that they are exposed to the same views as 0.

3.2.2. Control variables

We also use a few control variables. Specifically, we use gender, whether respondents were born in a city, their father’s level of education, the amount of pocket money they have, whether they are planning on studying abroad, academic performance, study major, and whether they are members of the Communist Party.

3.3. Analytical methods

We collected data from college students studying in one large comprehensive university in southern China; students from the same department are clustered within and subjected to the same learning environment. A major concern with analysis of clustered data is that the observations within the same cluster are not independent, and ignoring the correlation between the observations within the same cluster can lead to incorrect standard errors, too small p -values, and biased estimates, all of which can lead to incorrect interpretation of the relationship between media exposure and public opinion formation. In this paper, we estimate a random-effects model that takes the cluster sampling design into account and gives accurate standard errors, p -values, and unbiased estimates of the effect of media exposure on public opinion formation among college students in contemporary China. The intraclass correlation coefficient (ICC) indicates the degree of clustering or dependency among students studying in the same department. The ICC of 0.02 reveals possible clustering in the data and a random-effects model is the most statistically appropriate procedure to analyze clustered data. The variance of the random intercept, also known as the random effects, is 0.01. Results for the fixed effects are shown in Table 2.

4. Findings

4.1. Descriptive information

In our sample ($n = 650$), 67% are female students, and 23% are majoring in science. In addition, 60% were born in cities, and 30% have fathers with a college degree. Finally, 6% are members of the Chinese Communist Party, and 10% plan to study abroad (see Table 1).

Table 1. Descriptive information on key dependent variables, key independent variables, and mediators

	Mean	SD	Minimum	Maximum
<i>Key dependent variables</i>				
The percentage of students who support China's maritime claims in the South China Sea	45.80			
The percentage of students who strongly support China's maritime claims in the South China Sea	44.40			
The percentage of students who support using force to settle maritime disputes in the East China Sea	40.90			
The percentage of students who strongly support using force to settle maritime disputes in the East China Sea	44.60			
<i>Key independent variables</i>				
<i>Seeking news from state-owned media</i>				
<i>People's Daily</i>	0.16	0.37	0	1
<i>Global Times</i>	0.09	0.29	0	1
Domestic television news programs	0.23	0.42	0	1
<i>Seeking news from commercial media</i>				
<i>Southern Weekly</i>	0.08	0.26	0	1
<i>Xinmin Evening News</i>	0.06	0.24	0	1
<i>Shanghai Morning Post</i>	0.08	0.27	0	1
<i>Seeking news from Western media</i>				
Foreign television news programs	0.07	0.25	0	1
Foreign news websites	0.14	0.34	0	1
<i>Seeking news from domestic online news outlets</i>				
The Paper	0.10	0.30	0	1
Sohu News	0.32	0.47	0	1
Tencent News	0.56	0.50	0	1
<i>Incidental news exposure on social media</i>				
Weibo	0.69	0.46	0	1
WeChat	0.64	0.48	0	1
Encountering diversified opinions on Weibo	0.32	0.47	0	1
Encountering diversified opinions on WeChat	0.32	0.46	0	1
<i>Control variables</i>				
Female	0.67	0.47	0	1
Born in city	0.60	0.49	0	1
Father's level of education	3.82	1.09	1	7
Pocket money	1345.62	576.50	5	5,000
Planning studying abroad	0.10	0.29	0	1
Academic performance	3.13	0.44	0.45	4
Majored in science	0.23	0.42	0	1
Communist party membership	0.06	0.23	0	1

Table 2. Random-effects model results on differential media exposure on Chinese college students' attitudes toward China's maritime claims and disputes in the South and East China Seas

	Maritime claims	Maritime disputes
	Model 1	Model 2
Intercept	2.73***	3.20***
<i>Key dependent variables</i>		
Seeking news from state media	0.04	-0.02
Seeking news from commercial media	-0.07	-0.04
Seeking news from Western media	-0.06	-0.13 [#]
Seeking news from domestic online news outlets	0.05	0.02
Incidental news exposure on Weibo	0.03	0.08*
Incidental news exposure on WeChat	0.10**	0.08*
Encountering diversified opinions on Weibo	-0.20**	-0.21**
Encountering diversified opinions on WeChat	-0.06	-0.07
<i>Control variables</i>		
Female	-0.09	-0.05
Born in city	-0.01	0.03
Father's level of education	0.03	-0.04
Pocket money	0.00	0.00
Planning studying abroad	-0.29**	-0.11
Academic performance	0.08	-0.02
Majored in science	-0.03	0.03
Communist party membership	-0.01	-0.08

Note: [#]*p* < .10; **p* < .05; ***p* < .01; ****p* < .001.

Regarding their attitudes toward China's maritime claims and disputes in the South and East China Seas, 45.8% support and 44.4% strongly support the statement that China has indisputable sovereignty over the South China Sea islands and foreign nations have no right to interfere. In addition, 40.9% support and 44.6% strongly support using military force to settle maritime territorial disputes over the Diaoyu/Senkaku islands with Japan.

Regarding Chinese college students' media usage patterns, a small percentage seek international news from state-owned mass media such as the *People's Daily* (16%), the *Global Times* (9%), and domestic television news programs (23%); an even smaller percentage seek international news from China's commercial media such as *Xinmin Evening News* (8%), *Shanghai Morning Post* (6%), and *Southern Weekly* (8%). Few college students seek international news from Western media such as foreign television news programs (7%) and foreign news websites such as CNN and BBC (14%). Notably, a large number of students seek news from domestic online news outlets such as The Paper (10%), Sohu News (32%), and Tencent News (56%). More notably, the majority of students are incidentally exposed to international news on Weibo (69%) and WeChat (64%), and close to one-third are constantly exposed to cross-cutting political views on Weibo (32%) and WeChat (32%).

4.2. Media exposure and Chinese college students' attitudes toward China's maritime claims and disputes in the South and East China Seas

Next, we ran a random-effect model to examine the effect of differential media exposure on Chinese college students' attitudes toward China's maritime claims and disputes in the South and East China Seas. As Models 1 and 2 in Table 2 show, intentionally seeking news from state-owned mass media, commercial media, or domestic online news outlets exerts no effect on students'

attitudes toward whether China should settle its maritime claims and disputes in the South and East China Seas by force if necessary. Thus, the data do not lend support to H1a and H1b. Notably, exposure to Western media significantly reduces the likelihood that Chinese college students support the use of military force to resolve maritime disputes in the East China Sea, with a one-unit increase in Western media exposure leading to a .13-unit decrease in students' support for settling territorial disputes forcefully, net of other confounding effects, though the effect is only marginally significant ($p = .059$). However, Western media exposure exerts no effect on Chinese college students' attitudes toward China's maritime development in the South China Sea. Thus, the data provide partial support for H1c.

Like its offline counterpart, online intentional news exposure exerts no influence on students' attitudes toward international affairs. Incidental exposure to political information on WeChat significantly increases Chinese college students' support for China's development in the South China Sea, with a one-unit increase in incidental news exposure on WeChat leading to a .10-unit increase in their support of China's maritime claims in this area, net of other confounding effects. Incidental news exposure on Weibo exerts no such impact. Thus, the data provide partial support for H2a and full support for H3. Moreover, stumbling upon political news on WeChat and Weibo significantly increases Chinese college students' support for the use of military force to resolve maritime disputes over the Diaoyu/Senkaku islands, with a one-unit increase in incidental news exposure on Weibo and WeChat leading to a .08-unit increase in students' support for using force to protect China's territorial integrity, respectively, net of other confounding effects. Thus, the data lend full support to H2a when it comes to students' attitudes toward China's maritime disputes in the East China Sea. In line with our prediction, incidental exposure to cross-cutting opinions on Weibo significantly reduces the likelihood that Chinese college students support using military force to settle China's maritime claims and disputes in the South and East China Seas, with a one-unit increase in cross-cutting exposure on Weibo leading to a .20-unit decrease in students' support for China's maritime claim in the South China Sea and a .21-unit decrease in their support for the use of military force to resolve China's maritime disputes in the East China Sea, net of other confounding effects. Thus, H2b is partially supported. Surprisingly, incidental exposure to cross-cutting political views on WeChat exerts no such effect. In other words, cross-cutting exposure on WeChat is not conducive to the development of moderate, reasoned, and open-minded opinions on the world.

5. Discussion and conclusion

Most previous studies examine Chinese citizens' attitudes toward international affairs through a content analysis of user-generated content on social media. In China, as everywhere else in the world, people who hold extreme political views are more likely to express their opinions on social media. As a result, views expressed on social media are usually skewed toward extreme feelings and thus do not usually represent the opinions and attitudes of the general population (Shirk, 2011). In this study, we provide a more accurate reading of public opinion on international affairs among college students using the survey method. Of note is the finding that the vast majority of Chinese college students stand firmly behind China's claims in the South China Sea and urge the Chinese government to adopt a more hawkish approach toward maritime territorial disputes with Japan in the East China Sea. Our findings suggest that the Chinese government does not play the public opinion card to justify its assertive foreign policy; rather, it is more likely that China becomes more assertive in its foreign policy in response to rising nationalism among Chinese youth.

Regarding media effects, our results show that China's state-owned and commercial media play a minimal role in influencing public opinions among youth, given that Chinese college students seldom seek news from those sources, and if they do, such exposure exerts little or no impact on their attitudes toward China's foreign policy. Chinese youth prefer online news outlets to traditional print and broadcast mass media as their primary source of information if they take initiative to stay informed about current events. Our findings show that mass media in China does not play a vital role in shaping public opinion or reinforcing students' pro-government stance, partly because

young people nowadays are more likely to be incidentally exposed to information on social media and less likely to seek news from mass media. Social media has become an important medium for the Chinese government to manipulate public opinion. In line with the selective exposure hypothesis and minimal effects model, we find that intentional news exposure exerts no influence on public opinion. Students with strong political predispositions are more likely to seek news from like-minded media, which in turn reinforce their pre-existing beliefs and stances. We conclude that intentional news exposure is least likely to shape public opinion, at least among Chinese college students in contemporary China.

As mentioned previously, politics is not inherently interesting for most people, and thus it is not surprising that only a few students intentionally seek news from traditional print and broadcast mass media nowadays. Their lack of interest in politics does not mean that they are woefully ignorant of domestic and international affairs; on the contrary, our findings show that an overwhelming percentage of Chinese college students are incidentally informed about domestic and international politics while habitually using social media such as Weibo and WeChat for non-political purposes. It is worth mentioning that both Weibo and WeChat play an important role in shaping public opinion in contemporary China, though in different ways. WeChat plays a larger role in influencing public opinion than Weibo when measured as the frequency with which students incidentally receive information about China's maritime claims and disputes in the South and East China Seas via social media. WeChat gives its users more latitude to post, share, and discuss politically sensitive news and information within relatively small private circles in which users enjoy a heightened sense of security and privacy. More important, WeChat is a relationship-driven social networking site, and the additional relationship layer between senders and receivers substantially increases the persuasive power of a political message. Unlike WeChat, Weibo is a news media and thus does not have the group structure essential to strengthening the persuasive power of the news circulated on it. Weibo users are more likely to face a serious problem of information overload, especially those who follow a large number of people; the unfamiliarity between Weibo senders and receivers results in a large bulk of information going unread or read but not heeded. That being said, it is not surprising that incidental exposure to international affairs on Weibo does not exert as much influence as WeChat on users' attitudes toward China's foreign affairs.

When measured as whether they are embedded in a communication environment in which people disagree with one another openly and often, incidental exposure to cross-cutting political views on Weibo actually plays a larger role in shaping public opinion than cross-cutting exposure on WeChat. It seems that the additional relationship layers embedded in WeChat that strengthen the persuasive power of messages circulated lose their persuasive power when members in users' private circles disagree with one another. Such personal ties may make WeChat users feel uncomfortable and confused when they are surrounded by family members, friends, or classmates who disagree with one another politically, and they may simply refuse to pay attention to such contradictory information to avoid the discomfort associated with cognitive dissonance. Unlike WeChat, Weibo is an information-driven news media, and relationships are not mutually reciprocal. When encountering contradictory political views on Weibo, users are prone to think carefully and objectively about arguments on both sides without being disturbed by cognitive dissonance, due to their lack of personal relationships with people who disagree with one another on the site. We conclude that the positive effect of cross-cutting exposure is maximized when people are surrounded by unfamiliar others who disagree with one another. Under that circumstance, people can focus more on the information itself rather than the relationship they have with the senders.

To our knowledge, our study is the first to examine the effect of incidental news exposure from two dimensions: the frequency of incidental news exposure and the characteristics of a personalized communication environment. We find that frequent incidental news exposure on WeChat increases the likelihood of users to support the use of military force to defend China's national security and territorial integration while cross-cutting exposure on Weibo significantly reduce this

likelihood. That is, we find that cross-cutting exposure on Weibo modifies the negative influence of nationalist fervor and enables Chinese college students to move from extreme attitudes to moderate attitudes toward China's foreign policy.

Funding

The authors gratefully acknowledge the support from the University of Macau (Research Project: MYRG112(Y1-L2)-FSH11-WHY, University of Macau).

Author details

Hongyu Wang¹
E-mail: Hwang@umac.mo
Tianji Cai¹
E-mail: tjcai@umac.mo

ORCID ID: <http://orcid.org/0000-0002-8962-2660>

¹ Sociology Department, University of Macau (UM),
Avenida da universidade, Taipa, Macau, China.

Citation information

Cite this article as: Media exposure and Chinese college students' attitudes toward China's maritime claims and disputes in the South and East China Seas, Hongyu Wang & Tianji Cai, *Cogent Social Sciences* (2018), 4: 1482995.

References

- Baum, M. A. (2002). Sex, lies, and war: How soft news brings foreign policy to the inattentive public. *The American Political Science Review*, 96, 91–109. doi:10.1017/S0003055402004252
- Bode, L. (2016a). Political news in the news feed: Learning politics from social media. *Mass Communication and Society*, 19(1), 24–48. doi:10.1080/15205436.2015.1045149
- Bode, L. (2016b). Pruning the news feed: Unfriending and unfollowing political content on social media. *Research & Politics*, 3(3). doi:10.1177/2053168016661873
- Choi, S. (2014). Flow, diversity, form, and influence of political talk in social-media-based public forums. *Human Communication Research*, 40(2), 209–237. doi:10.1111/hcre.2014.40.issue-2
- Denemark, D., & Chubb, A. (2016). Citizen attitudes towards China's maritime territorial disputes: Traditional media and Internet usage as distinctive conduits of political views in China. *Information, Communication & Society*, 19(1), 59–79. doi:10.1080/1369118X.2015.1093527
- Entman, R. M. (1989). How the media affect what people think: An information processing approach. *The Journal of Politics*, 51(2), 347–370. doi:10.2307/2131346
- Esarey, A., & Xiao, Q. (2011). Digital communication and political change in China. *International Journal of Communication*, 5, 298–319.
- Eveland, W. P., Jr., & Hively, M. H. (2009). Political discussion frequency, network size, and “heterogeneity” of discussion as predictors of political knowledge and participation. *Journal of Communication*, 59(2), 205–224. doi:10.1111/jcom.2009.59.issue-2
- Fletcher, R., & Nielsen, R. K. (2017). Are people incidentally exposed to news on social media? A comparative analysis. *New Media & Society*. doi:10.1177/1461444817724170
- Garrett, R. K. (2009). Echo chambers online? Politically motivated selective exposure among Internet news users. *Journal of Computer-Mediated Communication*, 14(2), 265–285. doi:10.1111/j.1083-6101.2009.01440.x
- Gil de Zúñiga, H., Weeks, B., & Ardèvol-Abreu, A. (2017). Effects of the news-finds-me perception in communication: Social media use implications for news seeking and learning about politics. *Journal of Computer-Mediated Communication*, 22(3), 105–123. doi:10.1111/jcc4.2017.22.issue-3
- Heatherly, K. A., Lu, Y., & Lee, J. K. (2017). Filtering out the other side? Cross-cutting and like-minded discussions on social networking sites. *New Media & Society*, 19(8), 1271–1289. doi:10.1177/1461444816634677
- 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. doi:10.1080/1369118X.2014.994543
- Hyun, K. D., Kim, J., & Sun, S. (2014). News use, nationalism, and Internet use motivations as predictors of anti-Japanese political actions in China. *Asian Journal of Communication*, 24(6), 589–604. doi:10.1080/01292986.2014.944922
- Kaufhold, K., Valenzuela, S., & Gil de Zúñiga, H. (2010). Citizen journalism and democracy: How user-generated news use relates to political knowledge and participation. *Journalism & Mass Communication Quarterly*, 87(3–4), 515–529. doi:10.1177/107769901008700305
- Kim, Y. (2011). The contribution of social network sites to exposure to political difference: The relationships among SNSs, online political messaging, and exposure to cross-cutting perspectives. *Computers in Human Behavior*, 27(2), 971–977. doi:10.1016/j.chb.2010.12.001
- Kim, Y., Chen, H.-T., & Gil de Zúñiga, H. G. (2013). Stumbling upon news on the Internet: Effects of incidental news exposure and relative entertainment use on political engagement. *Computers in Human Behavior*, 29(6), 2607–2614. doi:10.1016/j.chb.2013.06.005
- Lee, F. L. (2015). Internet alternative media use and oppositional knowledge. *International Journal of Public Opinion Research*, 27(3), 318–340. doi:10.1093/ijpor/edu040
- Lu, J. (2013). Acquiring political information in contemporary China: Various media channels and their respective correlates. *Journal of Contemporary China*, 22(83), 828–849. doi:10.1080/10670564.2013.782129
- Lu, J., Aldrich, J., & Shi, T. (2014). Revisiting media effects in authoritarian societies: Democratic conceptions, collectivistic norms, and media access in urban China. *Politics & Society*, 42(2), 253–283. doi:10.1177/0032329213519423
- Messing, S., & Westwood, S. J. (2014). Selective exposure in the age of social media: Endorsements trump partisan source affiliation when selecting news online. *Communication Research*, 41(8), 1042–1063. doi:10.1177/0093650212466406
- Mutz, D. C. (2002). Cross-cutting social networks: Testing democratic theory in practice. *American Political Science Review*, 96(1), 111–126. doi:10.1017/S0003055402004264
- Mutz, D. C., & Young, L. (2011). Communication and public opinion: Plus Ça change? *Public Opinion Quarterly*, 75(5), 1018–1044. doi:10.1093/poq/nfr052
- Pentina, I., & Tarafdar, M. (2014). From “information” to “knowing”: Exploring the role of social media in contemporary news consumption. *Computers in Human Behavior*, 35, 211–223. doi:10.1016/j.chb.2014.02.045

- Price, V., Cappella, J. N., & Nir, L. (2002). Does disagreement contribute to more deliberative opinion? *Political Communication*, 19, 95–112. doi:10.1080/105846002317246506
- Scheufele, D. A. (1999). Deliberation or dispute? An exploratory study examining dimensions of public opinion expression. *International Journal of Public Opinion Research*, 11, 25–58. doi:10.1093/ijpor/11.1.25
- Shen, F., & Guo, Z. S. (2013). The last refuge of media persuasion: News use, national pride and political trust in China. *Asian Journal of Communication*, 23(2), 135–151. doi:10.1080/01292986.2012.725173
- Shi, T., Lu, J., & Aldrich, J. (2011). Bifurcated images of the US in urban China and the impact of media environment. *Political Communication*, 28(3), 357–376. doi:10.1080/10584609.2011.572479
- Shirk, S. L. (2011). *Changing media, changing China*. New York, NY: Oxford University Press.
- Stockmann, D., & Luo, T. (2017). Which social media facilitate online public opinion in China? *Problems of Post-Communism*, 64, 189–202. doi:10.1080/10758216.2017.1289818
- Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. *Political Behavior*, 30(3), 341–366. doi:10.1007/s11109-007-9050-9
- Testa, P. F., Hibbing, M. V., & Ritchie, M. (2014). Orientations toward conflict and the conditional effects of political disagreement. *The Journal of Politics*, 76(3), 770–785. doi:10.1017/S0022381614000255
- Tewksbury, D., Weaver, A. J., & Maddex, B. D. (2001). Accidentally informed: Incidental news exposure on the World Wide Web. *Journalism & Mass Communication Quarterly*, 78(3), 533–554. doi:10.1177/107769900107800309
- Valeriani, A., & Vaccari, C. (2016). Accidental exposure to politics on social media as online participation equalizer in Germany, Italy, and the United Kingdom. *New Media & Society*, 18(9), 1857–1874. doi:10.1177/1461444815616223
- Wang, H., Cai, T., Mou, Y., & Shi, F. (2017). Traditional resources, Internet resources, and youth online political participation: The resource theory revisited in the Chinese context. *Chinese Sociological Review*, 1–22. doi:10.1080/21620555.2017.1341813
- Wang, H., & Shi, F. (2018). Weibo use and political participation: The mechanism explaining the positive effect of Weibo use on online political participation among college students in contemporary China. *Information, Communication & Society*, 21(4), 516–530. doi:10.1080/1369118X.2017.1289234
- Wang, X., & Gu, B. (2016). The communication design of WeChat: Ideological as well as technical aspects of social media. *Communication Design Quarterly Review*, 4(1), 23–35. doi:10.1145/2875501
- Weeks, B. E., & Holbert, R. L. (2013). Predicting dissemination of news content in social media: A focus on reception, friending, and partisanship. *Journalism & Mass Communication Quarterly*, 90(2), 212–232. doi:10.1177/1077699013482906
- Weeks, B. E., Lane, D. S., Kim, D. H., Lee, S. S., & Kwak, N. (2017). Incidental exposure, selective exposure, and political information sharing: Integrating online exposure patterns and expression on social media. *Journal of Computer-Mediated Communication*, 22(6), 363–379. doi:10.1111/jcc4.2017.22.issue-6
- Wei, R., Lo, V., Xu, X., Chen, Y.-N. K., & Zhang, G. (2014). Predicting mobile news use among college students: The role of press freedom in four Asian cities. *New Media & Society*, 16(4), 637–654. doi:10.1177/1461444813487963
- Wells, C., & Thorson, K. (2017). Combining big data and survey techniques to model effects of political content flows in Facebook. *Social Science Computer Review*, 35(1), 33–52. doi:10.1177/0894439315609528
- Wohn, D. Y., & Bowe, B. J. (2016). Micro agenda setters: The effect of social media on young adults' exposure to and attitude toward news. *Social Media & Society*, 2(1). doi:10.1177/2056305115626750
- Yuan, E. (2011). News consumption across multiple media platforms: A repertoire approach. *Information, Communication & Society*, 14(7), 998–1016. doi:10.1080/1369118X.2010.549235
- Zhao, S. (2013). Foreign policy implications of Chinese nationalism revisited: The strident turn. *Journal of Contemporary China*, 22(82), 535–553. doi:10.1080/10670564.2013.766379



© 2018 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Cogent Social Sciences (ISSN: 2331-1886) is published by Cogent OA, part of Taylor & Francis Group.

Publishing with Cogent OA ensures:

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

Submit your manuscript to a Cogent OA journal at www.CogentOA.com

