Alternative framing:

The effect of the Internet on political support in authoritarian China

Abstract

This study seeks to identify and test a mechanism through which the Internet influences public support in an authoritarian environment in which alternative information is strictly censored by the state. Through online discussions, web users often interpret sanctioned news information in directions different from or even opposite to the intention of the authoritarian state. This alternative framing on the Internet can strongly affect the political views of web users. Through an experiment study conducted in China, we find that subjects exposed to alternative online framing generally hold lower levels of policy support and evaluate government performance more negatively. This finding implies that, even though access to information on sensitive topics is effectively controlled by the government, the diffusion capabilities of the Internet can still undermine the support basis of the seemingly stable authoritarian regime.
Introduction

The recent democratic movements in the Middle East and North Africa have reenergized the longstanding debate over the democratic potentials of the Internet in an authoritarian environment (Farrell, 2012; Howard and Muzammil, 2011; Lynch, 2011; Tufekci and Wilson, 2012). The evident role of the Internet and its associated social media in the protests of the Arab Spring has elevated the faith that the digital media can help bring down remaining authoritarian regimes. However, the later development in countries such as China, Singapore, Cuba, and Iran suggests that the Internet is still effectively controlled by authoritarian governments and is unable to facilitate any significant political upheavals. Many authoritarian regimes even reacted to the Arab Spring by fine-tuning and reinforcing their censorship programs. This contradictory picture of the role of the Internet invariably raises questions about the Internet’s independent role in authoritarian countries. Is the Internet merely a tool that can benefit both ordinary citizens and authoritarian states? What is the effect of the Internet in places where there are no Internet-facilitated political protests?

We address these questions by turning attention to the micro-process through which the daily use of the Internet changes individuals’ view towards the authoritarian state. In particular, we argue that “alternative framing,” facilitated by the diffusion of the Internet, can strongly affect popular support for an authoritarian regime. Framing refers to a process of selecting “some aspects of a perceived reality and mak[ing] them more salient in a communicating text” (Entman, 1993:52). Compared to framing in the traditional
media, a distinctive feature of Internet framing is the active role of web users in framing news events. Through online comments, blog posts, forum discussions, and other interactive features of the Internet, dissident opinion leaders and, more often, ordinary web users have gained venues to express their views on news events and issues. The interpretations and perspectives expressed by web users often construct social realities in directions that are different from or even opposite to the ones propagandized by the authoritarian state. This democratic nature of Internet framing entails particularly important implications in authoritarian countries such as China, where overt news reporting is strictly monitored and media framing has traditionally been dominated by the state.

To examine empirically the effects of alternative framing, we conducted a laboratory experiment in a major Chinese university. The news of China’s recent space program was chosen as means to present different frames. While the government framed the space program as the manifestation of the nation’s technological advancement and the righteousness of the party’s leadership, a significant portion of the Internet discussion framed the event as a “performance project” aimed at boosting the regime’s legitimacy and, more importantly, a misuse of resources that could otherwise have been used to improve the well-being of ordinary citizens. The experimental results show that exposure to the alternative framing embodied in Internet discussions significantly reduces the level of participants’ support for the space program policy and their evaluation of government performance in improving citizens’ well-being.
The contribution of this study is twofold. First, it constitutes one of the first attempts to theoretically specify and empirically test the mechanism through which the Internet influences political attitudes in an authoritarian environment. It offers empirical support for the independent role of the Internet and suggests that the Internet is not merely a tool for political activists to organize collective actions or for the state to consolidate authoritarian rule but, rather, an independent causal factor that generates the makeover of public’s mindset. Second, this study bridges and extends the study of the Internet with framing studies in the traditional media. On the one hand, it builds on an established paradigm of the traditional media research to understand the Internet effect. On the other hand, it adds a new dimension to traditional issue framing by emphasizing that the online framing process has been strongly shaped by the emergence of large numbers of active web users.

**Literature review: The Internet effect in authoritarian countries**

The conventional optimism about the effect of the Internet in authoritarian countries is built mainly upon three tenets (Diamond, 2010; Howard, 2010; Shirky, 2011; Zheng and Wu, 2005). First, it is believed that the expanded access to alternative information offered by the Internet challenges the information control of the authoritarian regime. The corruption of power, brutality, and social injustice can easily be exposed on the Internet due to its anonymity, fast speed, and low cost of communication (Best and Wade, 2009:256; Diamond, 2010:76). Second, digital information technology is praised for
facilitating anti-regime political movements (Chase and Mulvenon, 2002; Lynch, 2011: 304-6; Shirky, 2009). It has been documented that political activists have used the Internet to disseminate information, mobilize forces for change, and organize actions in a number of protests (Chowdhury, 2008; Diamond, 2010:79; Rheingold, 2002; McFaul, 2005), which was notably manifested in the Arab Spring (Freelon, 2011; Lotan et al., 2011). Finally, the Internet can foster the development of civil society by pluralizing the flow of information, widening and intensifying public deliberation, promoting alternative channels of social interaction, and facilitating networking among activists (Diamond, 2010:71-72; Hill and Sen, 2000; Lynch, 2011:306-307; Mercer, 2004; Murphy, 2009; Yang, 2003).

Many other scholars, however, question such utopian views of the Internet. Their skepticism stems mainly from the success of governmental control over the Internet. Through sophisticated regulation and censorship, the people of China, along with those of Vietnam, Cuba, Iran, and Singapore, have not received the benefit of the democratizing effects of the Internet (Boas, 2006; Harwit and Clark, 2001; Kalathil and Boas, 2001; 2003; Rodan, 1998; Taubman, 1998). By employing technological and institutional means, these authoritarian regimes have managed to use the growth of the Internet to help economic development, technology innovation, and globalization, and, at the same time, to reduce its harmful political effects (Bueno de Mesquita and Downs, 2005; Morozov, 2011). Researchers have argued that, particularly in China, by controlling the technological infrastructure, co-opting private Internet companies, documenting the
“real-name” access, and developing sophisticated censorship systems, the regime has successfully transformed itself into a “networked authoritarianism” and has imposed a close grip on cyberspace (Hachigian, 2001; Harwit and Clark, 2001; Hassid, 2008; Hung, 2010; MacKinnon, 2011).

The debate over the potentials of the Internet in authoritarian countries focuses primarily on the “revolutionary” role of the Internet in contentious politics and, specifically, its contribution to protests, large-scale upheavals, and dramatic cases of regime changes (Lynch, 2011: 307; Shirky, 2011: 30). It must be borne in mind, however, that the Internet produces “change over years and decades, not weeks or months” (Shirky, 2011: 30) by eroding the ability of states to monopolize information and arguments and by exacerbating people’s “dissatisfaction with matters of economics or day-to-day governance” of the state (Lynch, 2011: 5). Less scholarly effort, unfortunately, has been spent on theoretically explaining or empirically testing how daily consumption of the Internet can influence one’s views toward the authoritarian government and the regime in an environment in which digital information is severely filtered and censored. As pointed out by Farrell (2012: 38), the question of whether the Internet contributes to democracy is unanswerable because it “proposes no specific theory as to the connection” between the Internet and a political outcome. In fact, the number of quantitative studies on this topic is very limited.

This study explores the causal mechanism of the Internet’s effect on attitudinal change at the individual level by using China as a critical case. Such an empirical test of
the micro-process of the Internet effect can help disentangle the causal effects of the
Internet and provide empirical support for arguments in regard to the political
contribution of the Internet. Specifically, this study argues that, even if there is tight state
control of access to deviant information, exposure to online discussions of sanctioned
information can still undermine people’s support of the government, and one of the key
mechanisms of this undermining effect is user-generated alternative framing on the web.

**Issue framing and the Internet**

Issue framing has been regarded as an important mechanism through which the
traditional media affects public attitudes. Frames refer to the modes of presentation and
interpretation that construct social realities. Media framing works by either presenting
logically equivalent content differently, casting it in a negative or positive light, or
selecting some parts of a news item and making them salient, while ignoring or
downplaying other parts (Lecheler and de Vreese, 2011: 961). In this way, media framing
involves “problem definition, causal interpretation, moral evaluation, and/or treatment
recommendation.” (Entman, 1993: 52) Framing is critical to shaping people’s political
attitudes because it helps individuals make sense of an otherwise meaningless succession
of events (Goffman, 1974; Iyengar, 1991; Kinder and Sanders, 1990; Lecheler and de
Vreese, 2011; Nelson, Oxley, and Clawson, 1997; Slothuus, 2008).

The news information on the Internet contains frames, as well, and some media
researchers have examined the framing effect of the Internet news (Coleman and Hall,
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2001; Kopacz, 2008; Song, 2007; Xenos and Foot, 2005; Zillmann et al., 2004; Zhou and Moy, 2007). Zillmann et al. (2004), for instance, argue that Internet magazine viewers, compared to traditional media users, have greater freedom to select articles to read and, thus, demonstrate a stronger selective-exposure effect of news frames. Kopacz (2008) notes that the Internet provides candidates with unparalleled opportunities to discuss their issue stances and enables them to escape the traditional filtering by news reporters and pundits in conventional media.

An important aspect of Internet framing—the active role of the Internet users in framing news events—however, has not received adequate attention. What makes the Internet distinctive is the change in the relative position of journalists and the audience in constructing news, including the frame building. In the traditional media, the role of media users is very limited due to the prohibitive costs of message delivery and the restrictions imposed by government regulations. Accordingly, frame researchers have focused mainly on the influence of internal factors, such as journalists’ political orientation, professional values, and organizational constraints (Zhou and Moy, 2007: 81).

The rise of the Internet has tremendously increased the opportunities and enhanced the capacities of the public to participate in frame building. Compared to the traditional media, web-based communication is decentralized, which means that web users can actively contribute to both information dissemination and issue framing. Through blogging, commenting, discussing, and other means, almost any individual or
organization that has Internet access can discuss political or policy issues, publicize their thoughts, and promote their ideas and thus contribute to the framing of news events and issues. The one-way asymmetric model of traditional communication has been changed to a dialogical type of journalism, through which news production becomes a collective endeavor (Benkler, 2006; Lowrey and Anderson, 2005; Mitchelstein and Boczkowski, 2009: 573). The meanings and values developed through online discourse and attached to news events by web users are alternatives to those presented by journalists, politicians, and organizations.

**Internet framing in China**

Accompanied with rapid market reform, the mass media in China has experienced a great deal of changes in recent decades. In terms of the structure of the market, the official media is no longer the only information source. The commercialization has sprung the growth of a number of media outlets that are not bankrolled by government (Thomas and Nain, 2005; Tang and Iyengar 2011). In terms of news content, stories about the negative side of the society like corruption, poverty, and violation of norms and political uprisings in other authoritarian countries have become often seen in TV programs and newspapers (Hassid, 2008; Shirk, 2010; Stockmann, 2011). However, although the commercialization of the traditional media contributes to offering alternative information for the public, it has not yet transformed the overall pro-regime effect of the media in China. In fact, recent studies of the media effect have consistently revealed that media consumption is
significantly associated with higher levels of political support for the system and its political institutions (Kennedy, 2009; Stockmann and Gallagher, 2011; Tang, 2005; Yang and Tang, 2010). This is largely due to the fact that the official media can still be effectively controlled by the state. As scholars of the Chinese media have observed, even when some commercial media outlets do dare to challenge the official directions of major issues, the state is able to quickly step in and steer the deviant reporting back to the official line (Stockmann, 2010).

Compared to the tools of the traditional media, the Internet proves far more difficult be controlled given the sheer amount of users and their activities on the web. In particular, we in this study stress that the interactive features of the Internet enables the media users to participate in news making by framing social political issues as they prefer. This user-participated framing facilitated by the Internet entails especially important implications in China, where, among the traditional media, competing frames of news events, before the rise of the Internet, have been limited or nonexistent.

First, user-generated frames on the Internet constitute the most viable, if not the only, alternatives to the official frames provided by the state propaganda machinery. Under the traditional media environment in China, the authoritarian regime monopolized not only the supply of news information but also the framing of information. The regime has attempted to control the interpretation of important events and sensitive issues through reinforcing the journalists’ mouthpiece role in frame building and/or directly interrupting the deviant framing processes of media coverage (Zhou and Moy, 2007: 84). As a result,
news frames used by Chinese journalists largely have been consistent with the official lines (Chang et al., 1998; Fang, 1994; Luther and Zhou, 2005; Pan et al., 1999; Yang, 2003). The rise of the Internet enables ordinary citizens to act as agents of framing in news making, the first time in China. With all the interactive features of the Internet, active web users have gained the most effective platforms to publicize their own understandings of the nature of events and issues, interpretations of the cause or the consequences of social happenings, evaluations of institutions or politicians, and the solutions they prefer. At the very least, this means that, in the new media environment in China, not only news facts but also news frames no longer have to come from journalists or their overlords. Ordinary web viewers, on an unprecedentedly large scale, are exposed to those interpretations and views that are not fabricated by propaganda agencies of the state.

Second, the alternative frames that emerge from online discourse are often different from or opposite to the intention of the authoritarian state. This is due to a lack of ways to express alternatives through formal institutional approaches or through traditional media outlets. Overall, in China’s cyberspace, the tone of discussion forums tends to be negative and even cynical; the content of discussion often quickly moves from the specific news events to problems in the political, economic, and legal systems (Herold and Marolt, 2011; Sullivan, 2012; Tang and Yang, 2011; Yang, 2009; Zhou, 2009). Either promoted by online activists or generated through spontaneous and grassroots deliberation, a few counter-official frames can be identified in online discourse in contemporary China. For
instance, while the official media report a crime that involves officials as a judicial case, netizens tend to frame it as an abuse of power and social injustice. While the state media characterize the corruption of government officials as an isolated case and attribute it to a lack of oversight and self-discipline, dissenting individuals on the web associate it with the undemocratic nature of a political system that lacks checks and balances.

Third, the importance of such alternative framing on the Internet is further augmented by the fact that the access to alternative information sources is limited by the control of the Chinese state and the self-censorship of websites. As widely noted, the Internet in China is severely censored (Boas, 2006; Kalathil and Taylor, 2003; Rodan, 1998; Taubman, 1998). However, the focus of state control is on limiting the opportunity of citizens to have access to the news facts, especially those deemed harmful for the regime stability, not to interpretations of seemingly safe facts. The government’s ban on online discussions has targeted mostly sensitive topics, such as the Tiananmen Square Protest, Jasmine Revolution, and power struggles of top leaders. A recent comprehensive survey of social media websites in China conducted by King et al. (2012) confirms this pattern and shows that negative, even vitriolic, criticism of the state, political elites, and public policies is allowed on the web as long as it has no potential for collective action (Sullivan, 2012; Tang and Yang, 2011; Yang, 2009).

Online discussion of the sanctioned issues or seemingly safe topics, however, can go as rogue as do subversive news facts. A case in point is the heated online discussion triggered by the death of Steve Jobs, the former CEO of Apple Inc. One line of
discussions asked why China does not have an innovator like Steve Jobs. A general theme that emerged from this discussion is that, although China is not short of intelligent minds, there are too many restrictions and interventions, many of which are politically relevant, for these minds to emerge as a force. The government is blamed for its part in providing education that does not value critical thinking, monopolizing economic resources into the hands of few with connections, and failing to protect property rights and encourage innovation. A widely shared blog post states, “If Apple is a fruit in a tree, its branches are the freedom of thinking and to create, and the root is the constitutional democracy.”

Such examples are abundant in China’s cyberspace. Due to alternative framing enabled by the Internet, in a country where politics is supposed to be taboo, everything can become politically relevant. As long as websites allow for features such as the ability to post comments and to blog, active web users have an opportunity to voice their dissident views, and ordinary web viewers have an opportunity to come across these alternative views. While Chinese rulers may have been successful in reducing the amount of subversive news facts on the web, they are still exposed to the challenges posed by the alternative framing of Internet information.

**Experimental design**

To study the effect of the Internet’s alternative framing on political support, we conducted a posttest-only randomized experiment. Experiment has been the most frequently used method in the research of framing effect of the traditional media. We choose it to study the Internet because it enables us to empirically identify the causal mechanism we
selected for study and to test the Internet effect with greater confidence due to the control of the confounding effect of other variables that might affect political support.

Choosing the news event

The news story that we chose to embody different frames is a 2011 event in China’s recent space program—the docking of the *Shenzhou 8* capsule with the *Tiangong 1* module. We chose this news story for the following reasons. First, the frames employed by the state and Internet discussants to construct the news are “thematic frames” (Iyengar, 1991) in the sense that similar frames are found frequently in China’s political discourse and repeatedly adopted to construct and interpret many government-initiated projects (e.g., Three Gorge Dam). A study of such generic frames enables us to generalize findings to a wider range of issues. Second, a study of the frames of the space program can make a strong case for the effect of alternative framing of the Internet. Compared to cases of corruption, police brutality, social injustice, and other such high-profile incidents in contemporary China, the success of space docking in itself is a piece of positive information for the government and is more likely to induce public support. It is reasonable to expect that alternative framing of the Internet is less likely to function in this event than in other news events.

Presenting the frames

To present the official framing of the government, we took passages from *Xinhuanet.com*, the official website of the state-run Xinhua News Agency, and edited them together with news fact using web design software. The edited official framing states that the space
program has been carried out under the rightful ideological guidance of the party leaders and with strong material support from the party center in Beijing. “It proves that the party center is absolutely right in making the important decisions about manned space projects” (Xinhua 2011). The docking of the spacecraft is thus framed as the success of government efforts to advance technology and the righteousness of the party leadership (See online discussion in Appendix 1).

To present alternative framing, we took news comments made by the Internet users from two of the most popular web sites (Sina.com and Netease.com) and edited them together. Like in a real forum most of the edited comments point to two themes that are deviant from the state framing. First, they discredit the space program as a “performance project,” a project that the government uses to boost political legitimacy. Second, they do not necessarily value the technological achievement of the space program. Instead, they stress the urgency to improve the well-being of ordinary citizens (Minsheng), including alleviating poverty, increasing educational spending, and providing social welfare to those in need. The huge investment in space programs is thus framed as a misuse of valuable resources that should have been allocated for improving people’s livelihood and providing social welfare. To make the edited Internet discussion realistic, we also placed a few positive but short comments (e.g., “Congratulations!”) among the mostly negative ones.

Procedures
We recruited a total of 141 students from a major university in eastern China for our research project. The recruitment advertisement stated that the research project was about new media use and its effects among college students. Interested students were paid a small fee for their time and contribution. The student sample raises concerns about the generalizability of the experimental findings. While we are aware of the potential problem of external validity, we believe that, for at least two reasons, the student sample employed in this study can provide a reliable test of the mechanism of alternative framing.

First, instead of being homogeneous, our sample (as summarized in Appendix 2) varies considerably on important demographic and political variables. For instance, about half of the participants are female, and about half come from a rural family background. The parents’ education ranges from 1 (no formal education) to 7 (with graduate degrees) and varies with a standard deviation of 1.33. Family economic situation ranges from the lowest to the highest on a scale from 1 to 10 with a standard deviation of 1.57. Second, college students stand as the most reliable pool of netizens in China. Internet users in China cluster among those who are relatively highly educated and young (Liu, 2011; CNNIC, 2012). Although we do not intend our findings to apply to the whole netizen population, it is reasonable to believe that the effect of alternative framing observed in our sample does not differ drastically from that seen among most other web users in China (see more discussions in conclusion).

The experiment was conducted in five evenings in a computer lab in November 2011. A pilot experiment was conducted beforehand in the same month to ensure that the
experimental setup and procedures were appropriate. Once seated in the lab, participants were asked to complete a questionnaire that probed their demographic backgrounds. They were instructed to carefully read the questions and information and assured that their responses would be kept strictly confidential. Then, the participants were randomly directed to read one of three types of web pages on computers: dry information of the docking (46 participants, control group), information with official framing (47 participants, official group), and information with online alternative framing (48 participants, alternative group).

Immediately after viewing those web pages, the participants were asked to complete a posttest questionnaire. We first asked them to answer a couple of factual questions in regard to the docking procedure itself. We then asked a set of questions that concerned the level of support for the government in various aspects. Questions in regard to the use of the media and the Internet also were asked. After the survey, the students were debriefed on the purpose of this research and the lab manipulation.

**Variables and measurement**

We aim to show whether the exposure to online alternative frames alters one’s political support. We compare participants’ political support in three dimensions: (1) the support for the specific policy (i.e., space program), (2) the evaluation of government performance (in advancing technology and improving people’s well-being), and (3) the overall support of the regime (diffuse support). As emphasized by Norris (1999, p. 9),
“political support needs to be understood as a multi-dimensional phenomenon … since there are significant theoretical and empirical gradations within different parts of the regime.” In order to reveal the ways in which online framing affect ordinary Chinese people’s support for the CCP rule, we tailored Easton’s (1965; also see Chen, 2004; Norris, 1999) framework of specific support and diffuse support into three subdimensions: policy support, performance support, and diffuse regime support. As noted by Easton (1965; 1975), while specific support is formed in response to specific policies and temporal performance of the incumbent authority, diffuse support tends to be more stable and to reflect citizens’ deep-rooted commitment to the political system. Together, they can be seen as a continuum that moves from the most specific support for the space program to the most diffuse support for the regime. We expect that the impact of Internet framing tends to decrease as the objects of political support become less specific.

We measure one’s policy support for the space program by asking the participants to answer the question: “To what extent do you support China’s policy of space programs like the docking of Tiangong 1 and Shenzhou 8?” The answers range from “strongly oppose” to “strongly support” on a five-point scale.

We fashion four items to capture the respondents’ evaluation of government performance: promoting economic development, advancing technology, improving people’s well-being, and fighting official corruption. For each of the items, the participants were asked to grade government-policy performance on a five-point scale, ranging from “very bad” to “very good.” Among the four policy domains, we focus on
“technology advancement” and “well-being improvement,” as these two areas are directly related to frames used by either official framing or alternative framing.

To measure diffuse political support, we average the degree of participants’ agreement to the following two statements: (1) “I believe that the current political system truly represents and serves the interest of the Chinese people”; and (2) “Although there are faults in the political system of our country, I think that it best suits China’s situation.” The responses range from “strongly disagree” to “strongly agree” on a five-point scale. The summary statistics for these dependent variables and other variables used in this study are reported in Appendix 2.

**Analyses and results**

We first estimate the effects of the Internet’s alternative framing on political support by comparing the mean scores of the three different groups and conducting independent samples t-test.

*Policy support*

Figure 1 displays the means of participants’ policy support for the government’s space program. It shows that participants who were assigned to read alternative frames are less supportive of space programs than were those who read only the dry information on the spacecraft docking. Reading alternative frames decreases the mean support level from 4.24 to 3.52. The mean difference between the two groups (0.72) is statistically significant in a t-test ($t_{92} = 4.04, p = .0001$). The effect of alternative framing is more evident when the alternative group is compared to the official group. The mean difference
between those two groups is 0.86 ($t_{93} = 5.56$, $p = .0000$). This demonstrates that online discussion works opposite to the direction of the government’s intention.

Moreover, the exposure to the official frame increases one’s support of government policy, from 4.24 in the control group to 4.38 on average. This difference, however, is relatively small in magnitude and not statistically significant ($t_{91} = .92$, $p = .39$). This indicates that government propaganda has failed to get the support of the audience for the policy that it advocates.

**Government performance evaluation**

As for the two dimensions of government performance, different patterns are observed. First, in the policy area of “technology advancement,” as shown in Figure 2(a), the mean values of the responses of both the official group and the alternative group are higher than that of the control group (control group, 3.48; official group, 3.77; alternative group, 3.69). The mean difference between the control group and the official group is statistically significant at a less strict statistical level of $p = 0.10$ ($t_{91} = 1.77$, $p = .08$). This implies that the effort to associate the success of spacecraft docking with government leadership makes the participants appreciate, to some extent, the work of the government. The difference between the control group and the alternative group is not statistically significant ($t_{92} = 1.22$, $p = .23$). Negative framing does not make people think less of the government’s achievement in advancing technology. Given the extraordinary progress of technology, as evidenced by the *Tiangong* and *Shenzhou* programs, it is, in fact, not
reasonable to expect that the Internet users would assess the government less favorably in this area.

[Insert Figure 2 about here]

Interestingly, in the policy area of “well-being improvement” that is directly related to alternative framing, as displayed in Figure 2(b), we observe a pattern identical to the pattern of the effect of alternative framing on specific policy support. The alternative framing of online discussions decreases participants’ evaluation of government performance. Exposure to an alternative frame leads to a lower level of evaluation compared to both the control group (2.27 vs. 2.63) and the official group (2.27 vs. 2.72). The two pairs of mean differences are statistically significant ($t_{92} = 2.19, p = .031; t_{93} = 2.73; p = .0077$, respectively). The mean difference between the control group and the official group is not statistically significant in a $t$-test ($t_{91} = .55, p = .58$).

This finding indicates that alternative framing works in a direction opposite to the intention of the state. The success of the spacecraft docking is supposed to be a piece of absolutely good news for the government. However, a seemingly unrelated policy area becomes relevant due to online discussion; the alternative framing based on the problems of that policy area decreases one’s subjective evaluation of government performance. The participants did not deny that the government had done a great job in advancing technology. However, at the same time, they believe that the resources were misplaced and that the government should do a better job in improving the well-being of the ordinary citizens.
Diffuse (or affective) support

We did not observe any significant difference between the three groups in regard to diffuse support (Figure 3). This suggests that, although online framing can strongly affect one’s support of a specific policy or evaluation of government’s performance in certain policy areas, it does not necessarily lead to immediate attitudinal change toward the regime as a whole. This finding is consistent with our expectation, as discussed earlier, diffuse support, as a key dimension of regime support, is shaped mainly by prolonged sociopsychological forces and, thus, is only weakly associated with people’s spontaneous responses to specific policies and performance of incumbent authority (Chen, 2004; Easton, 1965).

[Insert Figure 3 about here]

This finding, however, does not necessarily serve to dismiss online framing as an important force in shaping ordinary Chinese web-users’ political support. After all, for the participants in the alternative group, the online framing embedded in our experimental study is only a one-time and short-term exposure. Ordinary web-users in China, however, are frequently exposed to various alternative framings that can strongly reduce their support of the government’s specific policies and performance. As emphasized in earlier studies (e.g., Li, 2008; Seligson and Muller, 1987), such long-term accumulation of negative attitudes toward a government’s policies and performance can finally spill over to the regime itself.
We further regress each of the attitudinal variables on the two treatment variables (ordered logistic regression), along with control variables (in Table 1). We first include only two dichotomous treatment variables and then control socioeconomic status variables, media use variables, and preexisting attitudinal variables. The regression results confirm the pattern in regard to the effect of alternative framing presented so far. Consistently, exposure to online discussion is negatively associated with policy support and evaluation of government performance in wellbeing or welfare improvement (Models 1-4). Further, that association is statistically significant. It does not lead to significant changes in general support of the regime (Models 5-6). Official framing, in contrast, demonstrates no significant effect on political support of interest, although those who are guided to read government interpretations hold slightly more positive attitudes toward the government.

[Insert Table 1 about here]

The effect of the Internet might be conditional upon other variables such as gender, hometown residence, family economic situation, habits of media use, or preexisting values. Our analyses suggest, however, that none of the interaction terms between the information treatment and these factors is statistically significant in different trials of analyses. This indicates the significance of the framing effect of the Internet across different sociodemographic groups. Regardless of participants’ socioeconomic background or values, once exposed to Internet framing, they will hold a more negative view toward government policy and performance.
To our knowledge, our study is the first experimental study of Internet effect in authoritarian environment, particularly in China. We address the robustness of our findings from several ways. First, to correct potential errors caused by imperfect randomization, we introduce the matching procedures suggested by Imai (2005). We then conduct a mean comparison analysis using the matched data and find that all the results are highly consistent with findings that emerged from the original data. Moreover, the results that emerged from this experimental study are highly consistent with those based on survey data of a representative sample (Lei, 2011; Tang et al., 2012).

Our results differ from those of other research, however, in that we have identified a causal mechanism through which such results are generated and submitted that mechanism to an empirical test. Moreover, the existing studies of the Internet in China did not focus directly on political support. We thus conducted an additional regression analysis using a national representative sample collected by Asia Barometer (2008). Although the survey questions used in Asia Barometer are not exactly the same ones we used in this experiment, two items in the questionnaire suffice to test the robustness of our findings. The findings (see Appendix 4) are largely consistent with the experimental findings we obtained from this experimental study.

**Discussion and conclusion**

Given the rapid diffusion of the Internet in authoritarian countries, it is urgent to study its political consequences. In China, a country with half a billion Internet users, in particular, we need to know whether and how the daily use of the Internet reshapes the public’s
orientation toward the authoritarian regime. In this study, we argue that, even in an authoritarian environment in which the Internet use is tightly censored by the state, the diffusion of the Internet can undermine the political support for an authoritarian regime. The Internet is able to do so because it enables the public to interpret issues as they prefer and, thus, to contribute to forming news frames. This democratic nature of the Internet challenges the authoritarian rule in that the public is exposed to alternative interpretations of news events and social political issues on an unprecedentedly large scale. The results of this experimental study imply that the diffusion of the Internet erodes the public’s support of the CCP regime by influencing its users’ political views toward directions unfavorable to the party-state. For this reason, we should not regard the Internet ineffective in making political changes in China just because there lacks Internet-facilitated popular uprisings.

We have limited the scope of this research to attitudinal change at the individual level which is an important subject in itself. But the findings can shed new light on the understanding of the relationship between the Internet and collective actions. Protests are only the end product of prolonged societal changes (Lynch 2011, 5). For large-scale protests and mass mobilizations to take place, it needs the public to be dissatisfied with, alienated from, and agitated by the state through a long and gradual process of attitudinal makeover. Although the Internet may at the moment have failed to generate large-scale political uprisings in China, this study suggests that, it may still be contributing to that
process by alienating citizens from the regime if uprisings were going to happen in the end.

A study of individual-level attitudinal change in China where uprisings like the Arab Spring have not yet happened therefore helps identify the independent role of the Internet in political changes and thus avoid either overestimation or underestimation of its contributions. On the one hand, the observed role of the Internet in facilitating collective actions like those in the Arab Spring does not necessarily indicate that the new media directly caused any of the outcomes with which they have been associated (Lynch 2011, 302). Any major political changes could have been contributed by a large range of factors like economic crisis, poverty, corruption, and external pressure. For this reason, even with the apparent role played by the Internet in the Arab Spring, many still are circumspect about its real contribution (Farrell 2012, 45). On the other hand, as suggested above, the lack of large-scale uprisings does not mean the absence of the Internet effect. The contribution of the Internet does not necessarily happen at the moment of uprising. It precedes it with the makeover of underlying attitudinal basis and thus constitutes a necessary, although not sufficient, condition for political changes. Without examining the underlying attitudinal changes, we cannot explain why the public “suddenly” change their side to support the opposition movement and how the apparently stable regime has lost public support before crisis.

Given the ostensibly high level of general political support in China, we do not suggest that the legitimacy of the Chinese state is in an imminent danger or the Internet
framing will definitely lead to uprisings. The relationship between attitudinal transformation and political actions is nothing but natural or definitive. For attitudinal changes to finally turn into political actions, it needs further spreading of the Internet to generate a critical mass and increase the cost of repression for the state, which in turn induces regime concession and encourages collective actions. The anti-system sentiment on the Internet has not led to political actions in China partly because the alternative information and, especially, alternative framing on the Internet has not reached a significant portion of the population due to digital divide and partly because the state has been able to effectively identify and repress the online calls for actions through cyber police system (King et al., 2013). But the ability of the state cannot be taken for granted. With the ever-increasing speed of the assimilation of the Internet and mounting dissatisfaction among the public generated by the online alternative framing, it becomes more difficult, if not impossible, for the state to censor all online activities or to forestall Internet-facilitated collective actions. For instance, the Chinese state has long planned to implement the “real-name” policy for blog sites requiring users to register with their real identity information. But this policy has failed due to the sheer workload of registering blog users, the shirking of Internet companies, and the wide criticism among the netizens.

We have been careful in addressing the external validity issue. But the findings of this study are not definitive, given that we conducted only one experiment in one place at one time. We do not intend our findings to be boldly generalized and further studies are needed to investigate the political effect of the Internet among other segments of the
population. The less educated people, for instance, are less exposed to the Internet information or discussion. But with fast assimilation of the digital technology, more and more people with lower education or in rural places begin to gain access to the Internet in China. It is important to know how the alternative information on the Internet influences the political views of these people who are presumably more prone to the influence of external information. In contrast, some other people, like young professionals, lawyers, and writers are more politically active in reading alternative framing and information on the Internet than college students. More importantly, these active users are usually the ones who framing social political issues by making comments, publicizing opinions, and initiating debate. Studies are needed to explore the evolution of cyberspace discussion of social and political issues and the role of these active users in that process. Lastly, in addition to experiment and survey-based quantitative methods, a comprehensive understanding of the Internet also requires qualitative research like case studies and process tracing. Qualitative methods are especially useful to study the process of framing building and the development of online discourse. In any event, the study of the Internet effect should aim to uncover the more specific mechanisms under the authoritarian rule, instead of just focusing on political uprisings at the dawn of regime demise.
References


Figure 1. Average level of support for space program policy.

Data source: Authors’ collection
Figure 2. Average level of evaluation of government performance.

(a) Technology Advancement

(b) Well-being Improvement

Data source: Authors’ collection
Figure 3. Average level of diffuse support.

Data source: Authors’ collection
Table 1. Estimation of Policy Support, Evaluation, and Diffuse Support

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<th>Government Evaluation (Well-being)</th>
<th>Diffuse Support</th>
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Data source: Authors’ collection, available upon request.
Coding and summary statistics of all variables are reported in Appendix 2.
Model: Ordered logistic regression, analyses of unmatched data.

*** p = .01, **p = .05, *p = .10
Endnotes

2 On November 1, 2011, the unmanned spacecraft Shenzhou 8 was launched from the Jiuquan Satellite Launch Centre into orbit. On November 3, it was hooked up with the already orbiting Tiangong 1 space laboratory module. The joint complex flew together for ten days to test the reusability of the docking system. The tests of docking and rendezvous operations of the two spacecraft are part of the effort of the Chinese government to set up a permanent, manned space station by 2020.
3 Due to the political sensitivity of the issue under study, we cannot name the university.
4 A recent report shows that over 90% of Internet users have received at least a junior high school education, and over 80% of the users are younger than 40 (CNNIC, 2012).
5 We stated that their responses would be recorded in a dataset without any connections to their personal identities and that the online trace of their responses would be deleted one hour after the experiment.
6 All main analyses in this study are conducted in STATA. Analysis of matched data for Appendix 3 is conducted in R.
7 The analytic results based on matched data are available in Appendix 3.