



THE HONG KONG  
POLYTECHNIC UNIVERSITY

香港理工大學

Pao Yue-kong Library

包玉剛圖書館

---

## Copyright Undertaking

This thesis is protected by copyright, with all rights reserved.

**By reading and using the thesis, the reader understands and agrees to the following terms:**

1. The reader will abide by the rules and legal ordinances governing copyright regarding the use of the thesis.
2. The reader will use the thesis for the purpose of research or private study only and not for distribution or further reproduction or any other purpose.
3. The reader agrees to indemnify and hold the University harmless from and against any loss, damage, cost, liability or expenses arising from copyright infringement or unauthorized usage.

### IMPORTANT

If you have reasons to believe that any materials in this thesis are deemed not suitable to be distributed in this form, or a copyright owner having difficulty with the material being included in our database, please contact [lbsys@polyu.edu.hk](mailto:lbsys@polyu.edu.hk) providing details. The Library will look into your claim and consider taking remedial action upon receipt of the written requests.

**RESILIENCE TO INFORMATION MANIPULATION: THE CASE OF CHINESE  
NETIZENS**

**LIANG JIACHEN**

**PhD**

**The Hong Kong Polytechnic University**

**2022**

**The Hong Kong Polytechnic University**

**Department of Applied Social Sciences**

**Resilience to Information Manipulation: The Case of Chinese Netizens**

**A thesis submitted in partial fulfilment of the requirements for the  
degree of Doctor of Philosophy**

**October 2021**

## CERTIFICATE OF ORIGINALITY

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, it reproduces no material previously published or written, nor material that has been accepted for the award of any other degree or diploma, except where due acknowledgement has been made in the text.

\_\_\_\_\_ (Signed)

LIANG, Jiachen \_\_\_\_\_ (Name of student)

## **Dedication**

I dedicate this thesis to people who support me, who accompany me, and who believe in me.

## **Abstract**

Authorities in authoritarian regimes use information manipulation to sustain regime legitimacy in the 21st century, but studies have found that citizens in these regimes can be resilient to this type of manipulation. Most of the studies thus far have focused on citizens' resilience to censorship, whereas the current research examines citizens' resilience to propaganda. Through two online survey experiments conducted in mainland China, this study finds that Chinese netizens are able to distinguish state propaganda from critical opinion and that they tend to expose themselves to online discussions deviating from official discourses. In addition, Chinese netizens are likely to view social media comments that disagree with the state-proposed policies in an emotional manner. Finally, exposure to counter-official information can significantly decrease individuals' support for state-proposed policies. The current study also provides methodological reflection on the application of survey methods by examining the effectiveness of two survey quality boosters: instrumental manipulation checks and survey motivational messages. Through another online survey experiment conducted in mainland China, this study finds that instrumental manipulation checks may increase survey participants' commitment to a survey; specifically, exposure to instrumental manipulation checks is noted to increase survey participants' time spent on the survey questions significantly.

*Keywords:* Information manipulation, propaganda, authoritarian regimes, resilience, social media comments, survey experimental methods, survey respondents' commitment

### **Publications arising from the thesis**

Wong, S. H. W., & Liang, J. (2021). Attraction or distraction? Impacts of pro-regime social media comments on Chinese netizens. *Political Behavior*, 1-25.

## **Acknowledgements**

I want to thank my chief supervisor, Dr. Stan Wong, for his tremendous help throughout the 4 years of my Ph.D. study. In addition to being a kind and patient mentor, he is truly a good friend. His coaching not only makes me more skillful academically but also influences my life philosophy, allowing me to treat my work and life more meticulously, seriously, and responsibly. His passion and enthusiasm for academic research have inspired me greatly. I sincerely appreciate all the knowledge and wisdom he has afforded me.

I also want to thank my co-supervisor, Prof. Juan Chen, for the great assistance she offered me. Her many insightful comments and suggestions allowed me to make further progress in my research. I truly appreciate her kindness and encouragement, which always motivate me to reach my full potential.

Next, I want to thank Prof. Christian Goebel, who supervised me during my academic exchange in the Department of East Asian Studies at the University of Vienna. He offered me great help in my study and research. I have also taken much of his advice when writing this thesis. I also learned useful research skills from him.

I also want to thank the Department of Applied Social Sciences at The Hong Kong Polytechnic University. The members of this department provided me with a lot of support during the study period. In particular, Ms. Shirley Hui and Ms. Fanny Cheng provided me



with a significant amount of administrative assistance. Their responsible attitude toward work and kindness toward others are valuable to me and inspire me every day.

I want to thank my parents who always love me, care about me, and believe in me. If it were not for them I would not have been able to complete my Ph.D. journey. They have always been encouraging and provided me with full support whenever I have encountered any difficulties. Their love is my biggest motivation. I hope that the completion of my Ph.D. can make them proud of me.

I also want to thank all my friends who have accompanied me and all my fellow colleagues who have given me a lot of valuable advice on my research—particularly Dr. Heng Xu, Dr. Qiushi Zhou, Dr. Yangyong Zhang, Dr. Qiqi Chen, Dr. Giulia Cuini, Dr. Lin Gong, Mr. Jinliang Shen, Ms. Qian Jin, Mr. Shuai Zhou, Ms. Xiaoyan Chen, Ms. Qifan Ding. I sincerely hope my fellow colleagues will have a bright future in their own academic careers.

Finally, I want to thank myself for not giving up and completing my Ph.D. Many times when I encountered any obstacle I doubted myself whether I am a “Ph.D. material.” Nonetheless, I managed to persevere by developing confidence and bravery on this adventurous journey. I believe these qualities will stay and benefit me throughout my entire life.

# Table of Contents

<b>Chapter 1: Introduction</b> .....	<b>1</b>
<b>Reference</b> .....	<b>11</b>
<b>Chapter 2: Curiosity Killed the Echo Chamber: Investigating Chinese Netizens' Responses to Critical Comments Against the Government</b> .....	<b>25</b>
<b>1. Introduction</b> .....	<b>26</b>
<b>2. Literature Review</b> .....	<b>29</b>
<b>3. Theories and Hypotheses</b> .....	<b>30</b>
3.1 Online Comments as an Echo Chamber.....	30
3.2 Online Comments as an Alternative Information Source .....	32
3.3 Effects of Online Comments on Regime Legitimacy .....	33
<b>4. Research Design</b> .....	<b>36</b>
4.1 Comments on Sina Weibo.....	36
4.2 Online Survey Design .....	41
<b>5. Estimations and Results</b> .....	<b>45</b>
5.1 Estimations of Comment Choice Over Time .....	45
5.2 Approval of Policies.....	55
<b>6. Conclusion</b> .....	<b>60</b>
<b>Reference</b> .....	<b>63</b>
<b>Chapter 3: Why View Comments? Motivations Underlying Chinese Netizens' Social Media Comment Exposure</b> .....	<b>74</b>
<b>1. Introduction</b> .....	<b>75</b>
<b>2. Literature Review</b> .....	<b>78</b>
<b>3. Hypotheses</b> .....	<b>81</b>
3.1 Comment Exposure.....	81
3.2 Attitudinal Change .....	85
<b>4. Research Design</b> .....	<b>86</b>

4.1 Survey Experiment .....	86
4.2 Comment Selection.....	90
<b>5. Specifications and Results .....</b>	<b>92</b>
5.1 Exposure Time Spent on Comments.....	92
5.2 Attitudinal Change .....	95
<b>6. Conclusion.....</b>	<b>109</b>
<b>References .....</b>	<b>112</b>

**Chapter 4: Instructional Manipulation Checks Versus Motivational Messages: Ways to Boost**

<b>Survey Response Quality.....</b>	<b>131</b>
<b>1. Introduction .....</b>	<b>131</b>
<b>2. Literature Review .....</b>	<b>133</b>
<b>3. Hypotheses .....</b>	<b>136</b>
3.1 Effects of Instrumental Manipulation Checks and Survey Motivational Messages on Survey Commitment.....	136
3.2 Effects of Instrumental Manipulation Check Passage on Survey Commitment .....	139
<b>4. Outcome Variables of Interest .....</b>	<b>141</b>
4.1 Time Spent on Two Sets of Experimental Questions.....	141
4.2 Willingness of Cooperation.....	141
4.3 Answers Variability of Grid-design Questions .....	142
<b>5. Experimental Design .....</b>	<b>143</b>
5.1 Control Group .....	144
5.2 Instrumental Manipulation Checks Group.....	145
5.3 Motivational Messages Group.....	146
5.4 Combination Group .....	147
<b>6. Specifications and Results .....</b>	<b>147</b>
6.1 Time Spent on Experimental Questions .....	149
6.2 Willingness-to-cooperate.....	151
6.3 Answers Variability of Grid-design Questions .....	152
6.4 Effects of Instrumental Manipulation Checks Passages on Survey Commitment .....	153
<b>7. Conclusion.....</b>	<b>176</b>

<b>References .....</b>	<b>179</b>
<b>Chapter 5: Conclusion .....</b>	<b>186</b>
<b>References .....</b>	<b>189</b>
<b>Appendices .....</b>	<b>191</b>
<b>Appendix 1: Questions and Coding of Control Variables .....</b>	<b>191</b>
<b>Appendix 2: Five Weibo Posts and Social Policies and Comments.....</b>	<b>193</b>
<b>Appendix 3: Weibo Posts and Comments .....</b>	<b>201</b>
Traditional Chinese Medicine Policy.....	201
Traditional Chinese medicine policy emotionally-agreeing comments.....	201
Traditional Chinese medicine policy analytically-agreeing comments.....	204
Traditional Chinese medicine policy emotionally-disagreeing comments .....	210
Traditional Chinese medicine policy analytically-disagreeing comments .....	213
COVID-19 Double-negative Report Policy.....	220
COVID-19 Double-negative report policy emotionally-agreeing comments.....	220
COVID-19 Double-negative report policy analytically-agreeing comments .....	224
COVID-19 Double-negative report policy emotionally-disagreeing comments .....	230
COVID-19 Double-negative report policy analytically-disagreeing comments .....	234
University Students Graduation Policy .....	241
University students graduation policy emotionally-agreeing comments.....	241
University students graduation policy analytically-agreeing comments.....	244
University students graduation policy emotionally-disagreeing comments .....	249
University students graduation policy analytically-disagreeing comments .....	252
<b>Appendix 4: Questions and Coding of Control Variables &amp; Pre/Post-attitudinal Questions.....</b>	<b>260</b>
<b>Appendix 5: Two Instrumental Manipulation Check Questions .....</b>	<b>265</b>

## Chapter 1: Introduction

In the 21st century, authorities in authoritarian regimes are reducing the usage of political repression; they are no longer ruling their countries through fear but through information manipulation (Lu, Aldrich, & Shi, 2014; Chen & Xu, 2017; Guriev & Treisman, 2019; Rozenas & Stukal, 2019). One approach to achieving such manipulation is censorship, which is a technique employed by the state that blocks all types of information unfavorable to the regime so as to prevent citizens from accessing undesirable content (Kalathil & Boas, 2001; Boas, 2006; King, Pan, & Roberts, 2013; Lorentzen, 2014, Pan, 2017). Nevertheless, the adoption of censorship may also blind the rulers, making them less informed about what citizens truly think of the ruling party. This is also the reason that some autocrats now allow a somewhat freer media environment to monitor public opinion and sentiment (Egorov, Guriev, & Sonin, 2009; Qin, Strömberg, & Wu, 2017). Censorship may also lead to citizens' resilience to information control (Roberts, 2020). Studies have suggested that blocking information motivates citizens to bypass censorship and actively search for blocked content (Hobbs & Roberts, 2018; Chen & Yang, 2019). Citizens' exposure to alternative information makes them more informed of what their government is attempting to conceal, resulting in citizens' dissent toward as well as lower evaluation of their government (Pan & Siegel, 2020; Wong & Liang, 2021).

Autocrats have therefore developed another approach to manipulating information: propaganda. In contrast to censorship, where content deemed inappropriate is directly deleted,

propaganda can facilitate the state in the proactive spread of pro-regime values to citizens and thus influencing public opinion (Brady, 2009; Huang, 2015; Liu, 2019). It often creates a competent image of the government, signaling the state's outstanding leadership (Huang, 2018). Whenever there is a crisis or an international dispute with foreign countries, propaganda is expected to persuade the masses that the government is handling the situation well (Stockmann, 2010; Weiss & Dafoe, 2019; Xu & Sun, 2021).

Propaganda is presented in numerous forms in authoritarian regimes—from printed materials, such as books and magazines, to videos and television broadcasts (Brady & Juntao, 2009; Stockmann, 2013; Lu, Aldrich, & Shi, 2014; Shambaugh, 2017; Pan, Shao, & Xu, 2020). However, with the rapid popularization of the Internet, the battlefield for propaganda has shifted greatly from offline spaces to the cyberspace (Creemers, 2017). The scale of the Internet in many authoritarian regimes has escalated tremendously over the past decades (Harwit & Clark, 2001; Greitens, 2013; Druzin & Gordon, 2018). The emergence of social media has further improved the efficiency of information diffusion (Li, Qian, Jin, Hui, & Vasilakos, 2015). In particular, the permission for user-generated content allows social media to become a public sphere not only for entertainment purposes but also for political expression and participation (Östman, 2012; Dylko & McCluskey, 2012; Gil de Zúñiga, Molyneux, & Zheng, 2014; Luca, 2015). Social media's potential for effecting political change in authoritarian regimes has been widely recognized (Shirky, 2011; Norris, 2012; Reuter & Szakonyi, 2015; Tucker, Theocharis, Roberts, & Barberá, 2017). For instance, some studies have argued that social media has led to the rise of the Arab Spring movement—an

anti-government movement that challenged the authoritarian regimes in the Arab world—during the 2010s (Frangonikolopoulos & Chapsos, 2012; Salvatore, 2014; Markham, 2014; Steinert-Threlkeld, 2017; Smidi & Shahin, 2017).

Considering the power of social media, autocrats in nondemocracies have learned to harness social media as a tool to sustain their regimes' legitimacy (Gunitsky, 2015; Rød & Weidmann, 2015). A way to achieve this goal is to spread propaganda on social media platforms by using crafted pro-regime messages, trolls, astroturfing, and disinformation, while amplifying the voice of regime supporters (Han, 2015; Aro, 2016; Miller, 2016; Fang & Repnikova, 2018; Repnikova & Fang, 2018; Lu & Pan, 2021). For instance, King, Pan, and Roberts (2017) indicate that the Chinese government hires commenters to fabricate millions of pro-regime social media posts and comments online to influence public opinion. The pro-regime content appears to be written by ordinary citizens who show their unconditional support for government and state policies. These government-sponsored propaganda materials may also distract netizens' attention from negative events as well as neutralize relevant criticisms toward the government (Yang, 2021; Lu, Pan, & Xu, 2021).

Most of the studies thus far have predominantly focused on how to detect and identify the pro-regime discourses (Han, 2015; King, Pan, & Roberts, 2017; Bolsover & Howard, 2019; Zhao & DeDeo, 2020), and the impact of the pro-regime content warrants examination (Stockmann, 2010; Huang, Wang, & Shao, 2018; Chen, 2019). This study attempts to contribute to this field of research by examining the effectiveness of pro-regime information

on netizens. In other words, this study seeks answers to one crucial question: What types of discourses on social media will netizens in an authoritarian regime self-select to expose themselves to—those that praise the regime or those that challenge the regime?

The research is based in China. I select China as the study site for two main reasons: First, China is an authoritarian state that has strict control over the Internet (Qiang, 2001; Yang, 2009; Marolt, 2011; Dong, 2012; Griffiths, 2021). It not only has the state-of-art online censorship system in the world, namely the Great Firewall (Zhang, 2006; Stevenson, 2007; MacKinnon, 2008; Tai, 2014), but also has a series of laws and policies regulating netizens' online behaviors (Yang, 2014; Deng & Liu, 2017; Jiang, 2010; McKune & Ahmed, 2018). Thus, in China, social media no doubt are subjected to close state surveillance (Fu, Chan, & Chau, 2013; Xu & Albert, 2014; Vuor & Paltemaa, 2015; DeLisle, Goldstein, & Yang, 2016). This tight control over the Internet, including social media, makes a good case to study the effects of information manipulation on citizens in authoritarian regimes.

Second, despite the tight controls and regulations, Chinese netizens use social media to engage in politics (Stockmann & Luo, 2015, 2019; Stockmann, Luo, & Shen, 2020). Social media platform such as *Sina Weibo*, a microblog, has been identified by many scholars as a public sphere that allows Chinese netizens to conduct political discussions on social events and policies (Chan, Wu, Hao, Xi, & Jin, 2012; Jiang, 2014; Rauchfleisch & Schäfer, 2015; Pang, 2018; Chen & Chan, 2017; Stockmann & Luo, 2017; Stockmann, Luo, & Shen, 2020). A certain level of criticisms can be tolerated on *Weibo* as long as they do not involve attempts



of mobilizing collective actions (King, Pan, & Roberts, 2013). Thus, the permission of diverse opinions on social media platforms in China renders the current research possible.

This research consisted of three individual studies. The first two studies apply online survey experiments to examine the effects of exposure to different kinds of social media comments on Chinese netizens, and the third study reflects on the survey methods. In the first study, more than 1000 Chinese netizens recruited from an online panel in mainland China were exposed to five social media posts regarding five social policies. After each policy exposure, they were provided with a chance to self-select to expose themselves to one of two different types of comments. These comments were either pro-regime comments, supporting the policy, or critical comments, which challenged the rationality of the policy. They also had the choice to not view any comments by skipping them. The study finds that when provided with an opportunity, the included Chinese netizens tended to view the comments that held a generally critical attitude toward the policy rather than the comments that praised the policy. The study further included another group of survey respondents, who were allowed no access to any type of comments. The study then asked these two groups of people to indicate whether they support the policy they see, and the findings suggest that compared with individuals who were allowed to view the comments (regardless of whether they were pro-regime or critical), those who were not allowed significantly supported the policy. Therefore, this study argues that despite pro-regime propaganda on their social media, Chinese netizens are able to identify and bypass propaganda discourses. In addition, even a little “breathing space”—a place for online discussions on social media that allows both

pro-regime and critical comments to coexist—can influence Chinese netizens political attitudes toward state-proposed policies—exposure to online discussions makes netizens reflect on policies more critically, resulting in less support for the policies. This study also offers an alternative argument to current literature which suggests that propaganda is often used as a strategy to divert public attention from negative social events and protests (King, Pan, & Roberts, 2017; Roberts, 2018; Stukal, Sanovich, Bonneau, & Tucker, 2022). The findings of this study illustrate that Chinese netizens are still able to identify pro-regime propaganda and bypass the propaganda in order to seek alternative information. Propaganda as a distraction strategy may not be sufficiently effective in neutralizing regime critics and overwhelming the critical voices of the regime.

The second study delves further by not only examining whether comments that agree or disagree with the state policies are more appealing to Chinese netizens but also how these comments are expressed, either in an emotional or a rational manner, that may attract Chinese netizens' attention. Many scholars argue that online political deliberations are benign because they facilitate citizens' political participation and allow less politically informed netizens to acquire sufficient political knowledge (Stanley & Weare, 2004; Valenzuela, Kim, & Gil de Zúñiga, 2012; Chan, Wu, Hao, Xi, & Jin, 2012; Yamamoto, Kushin, & Dalisay, 2015). Nevertheless, recent studies have noted that these discussions can sometimes be destructive as well; they often turn into flame wars due to emotionally uncivil expressions, which polarize the political attitudes of the public (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2014; Su et al., 2018; Hwang, Kim, & Kim, 2018; Rheault, Rayment, & Musulan,

2019; Koiranen, Koivula, Malinen, & Keipi, 2021). Therefore, the second study investigates the motivation underlying Chinese netizens' online information consumption by answering two questions: (1) Do Chinese netizens consume more emotional or informative content when they are on social media? (2) Do Chinese netizens consume more content that holds a positive or negative view of the regime? The second study also adopts the online survey experiment method to answer these questions. In the survey, the respondents were asked to view three social media posts each regarding different social policies. After they viewed each post, they were randomly assigned to one of four groups each exposed to different types of social media comments regarding that particular post, including comments that agree or disagree with the policy in an emotional tone and comments that agreed or disagreed with the policy with a rational tone (a  $2 \times 2$  factorial design). The comments were drawn from actual social media posts, and the study used the outsourcing technique to allow the Chinese netizens to sort the comments into the aforementioned four types. The survey respondents were recruited differently from the outsourcing participants. This study tracked how many comments respondents tend to view when they were exposed to different types of comments, and finds that Chinese netizens are more likely to view comments that generally disagree with the proposed policy in an emotional manner. In addition, the individuals tend to be less supportive of the policy when they are exposed to comments that disagree with the policy, regardless of whether the comments are expressed emotionally or analytically. In other words, we find that the standpoint, not the expression form, of a comment matters in shaping individuals' political attitudes.

In contrast to the previous two studies, the final study does not tackle media politics in authoritarian regimes per se, but shifts the focus to the reflection of the application of survey methods so as to provide a methodological discussion on the usage of surveys in social science research. Although surveys are commonly used to conduct social science research, a vital question remains unanswered: How can survey response quality be improved? The problem is even more serious currently because more and more survey samples are recruited from online panels (Buhrmester, Kwang, & Gosling, 2011; Kees, Berry, Burton, & Sheehan, 2017; Li, Shi, & Zhu, 2018; Chmielewski & Kucker, 2020; Kennedy et al., 2020). Participant commitment to a survey must be monitored closely because participants may be from all over the Internet with different demographic characteristics and personalities. Because survey response quality determines data quality and thereby affects the validity of research analysis and findings, many survey experts have used methods to increase survey response quality such as monetary incentives (Shaw, Beebe, Jensen, & Adlis, 2001; Zagorsky & Rhoton, 2008; Mercer, Caporaso, Cantor, & Townsend, 2015) and progress indicator inclusion (Heerwegh & Loosveldt, 2006; Villar, Callegaro, & Yang, 2013; Sarraf & Tukibayeva, 2014; Amer & Johnson, 2014). In recent years, two methods have been increasingly used in survey-related studies: the use of instrumental manipulation checks, or “screeners” (Oppenheimer, Meyvis, & Davidenko, 2009; Berinsky, Margolis, & Sances, 2014), and survey motivational messages, or “seriousness checks” (Sakshaug & Crawford, 2010; Bayram, 2018; Verbree, Toepoel, & Perada, 2020). Instrumental manipulation checks include trick survey questions that appear to ask respondents to provide their self-report answers but subtly instruct them to provide a series of predetermined answers. Only when respondents pay enough attention to the question

text can they find out the subtle instruction. Survey motivational messages are textual messages displayed on a survey reminding respondents that only when they complete the survey seriously will their responses be valid and included in the research. These messages also thank and emphasize survey respondents' contribution to the research. In the third study, a horse race was conducted between the two survey quality boosters by using an online survey experiment. After the respondents were exposed to different boosters, the study recorded (1) respondents' time spent (in seconds) on answering the survey questions, (2) the number of questions that respondents were willing to answer, and (3) respondents' answers variability for grid-design questions. These three measurements together consist of respondents' overall survey commitment. This study finds that compared with motivational messages, instrumental manipulation checks significantly increase respondents' time spent on survey questions. In addition, correct answers to instrumental manipulation check questions may predict respondents' willingness of answering more survey questions. The findings imply that instrumental manipulation checks serve as not only a tool to detect survey respondents' attentiveness but also a booster that provides survey respondents a sense of engagement, thereby increasing respondents' survey commitment. After respondents are aware of the presence of the instrumental manipulation checks, they are likely to be more careful in the subsequent parts so as to avoid more potential trap questions. This awareness may be the reason that survey participants would spend more time completing the survey.

This research fits into the literature of citizens' resilience to information manipulation in authoritarian regimes (Geddes & Zaller, 1989; Chen & Xu, 2017; Rosenfeld, 2018; Roberts,

2020; Pan & Siegel, 2020). Although extant studies have put considerable emphasis on citizens' resilience to censorship in authoritarian regimes (Hobbs & Roberts, 2018; Chen & Yang, 2019; Roberts, 2020; Wong & Liang, 2021), this research argues that citizens in authoritarian regimes are also resilient to propaganda. Although autocrats in the 21st century have developed sophisticated tools to manipulate the media and the Internet to sustain their controls over society (Stockmann & Gallagher, 2011; Gunitsky, 2015; Guriev & Treisman, 2019; Rozenas & Stukal, 2019), citizens are not passive propaganda recipients, but they are increasingly sophisticated information consumers who can decipher crucial information from state propaganda.

## References

- Amer, T. S., & Johnson, T. L. (2014). It progress indicators: Sense of progress, subjective sense of time, user preference and the perception of process duration. *International Journal of Technology and Human Interaction (IJTHI)*, 10(3), 58-71.
- Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2014). The “nasty effect.” Online incivility and risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication*, 19(3), 373-387.
- Aro, J. (2016). The cyberspace war: Propaganda and trolling as warfare tools. *European View*, 15(1), 121-132.
- Bayram, A. B. (2018). Serious subjects: A test of the seriousness technique to increase participant motivation in political science experiments. *Research & Politics*, 5(2), 1-6.
- Berinsky, A. J., Margolis, M. F., & Sances, M. W. (2014). Separating the shirkers from the workers? Making sure respondents pay attention on self-administered surveys. *American Journal of Political Science*, 58(3), 739-753.
- Boas, T. C. (2006). Weaving the authoritarian web: The control of Internet use in nondemocratic regimes. In J. Zysman and A. Newman (Eds.). *How Revolutionary Was the Digital Revolution? National Responses, Market Transitions, and Global Technology*. Stanford, CA: Stanford.
- Bolsover, G., & Howard, P. (2019). Chinese computational propaganda: Automation, algorithms and the manipulation of information about Chinese politics on Twitter and Weibo. *Information, Communication & Society*, 22(14), 2063-2080.

- Brady, A. M. (2009). *Marketing dictatorship: Propaganda and thought work in contemporary China*. Lanham, Maryland: Rowman & Littlefield Publishers.
- Brady, A. M., & Juntao, W. (2009). China's strengthened new order and the role of propaganda. *Journal of Contemporary China*, 18(62), 767-788.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data?. *Perspectives on Psychological Science* 6(1), 3-5.
- Chan, M., Wu, X., Hao, Y., Xi, R., & Jin, T. (2012). Microblogging, online expression, and political efficacy among young Chinese citizens: The moderating role of information and entertainment needs in the use of Weibo. *Cyberpsychology, Behavior, and Social Networking*, 15(7), 345-349.
- Chen, D. (2019). Political context and citizen information: Propaganda effects in China. *International Journal of Public Opinion Research*, 31(3), 463-484.
- Chen, J., & Xu, Y. (2017). Information manipulation and reform in authoritarian regimes. *Political Science Research and Methods*, 5(1), 163-178.
- Chen, Y., & Yang, D. Y. (2019). The impact of media censorship: 1984 or brave new world?. *American Economic Review*, 109(6), 2294-2332.
- Chen, Z., & Chan, M. (2017). Motivations for social media use and impact on political participation in China: A cognitive and communication mediation approach. *Cyberpsychology, Behavior, and Social Networking*, 20(2), 83-90.
- Chmielewski, M., & Kucker, S. C. (2020). An MTurk crisis? Shifts in data quality and the impact on study results. *Social Psychological and Personality Science*, 11(4), 464-473.



- Creemers, R. (2017). Cyber China: Upgrading propaganda, public opinion work and social management for the twenty-first century. *Journal of Contemporary China*, 26(103), 85-100.
- DeLisle, J., Goldstein, A., & Yang, G. (2016). *The internet, social media, and a changing China*. Pennsylvania, US: University of Pennsylvania Press.
- Deng, J., & Liu, P. (2017). Consultative authoritarianism: The drafting of China's internet security law and e-commerce law. *Journal of Contemporary China*, 26(107), 679-695.
- Dong, F. (2012). Controlling the internet in China: The real story. *Convergence*, 18(4), 403-425.
- Druzin, B., & Gordon, G. S. (2018). Authoritarianism and the internet. *Law & Social Inquiry*, 43(4), 1427-1457.
- Dylko, I., & McCluskey, M. (2012). Media effects in an era of rapid technological transformation: A case of user-generated content and political participation. *Communication Theory*, 22(3), 250-278.
- Egorov, G., Guriev, S., & Sonin, K. (2009). Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American Political Science Review*, 103(4), 645-668.
- Fang, K., & Repnikova, M. (2018). Demystifying "Little Pink": The creation and evolution of a gendered label for nationalistic activists in China. *New Media & Society*, 20(6), 2162-2185.
- Frangonikolopoulos, C. A., & Chapsos, I. (2012). Explaining the role and the impact of the social media in the Arab Spring. *Global Media Journal: Mediterranean Edition*, 8(1),

10-20.

- Fu, K. W., Chan, C. H., & Chau, M. (2013). Assessing censorship on microblogs in China: Discriminatory keyword analysis and the real-name registration policy. *IEEE Internet Computing, 17*(3), 42-50.
- Geddes, B., & Zaller, J. (1989). Sources of popular support for authoritarian regimes. *American Journal of Political Science, 33*(2), 319-347.
- Gil de Zúñiga, H., Molyneux, L., & Zheng, P. (2014). Social media, political expression, and political participation: Panel analysis of lagged and concurrent relationships. *Journal of Communication, 64*(4), 612-634.
- Greitens, S. C. (2013). Authoritarianism online: What can we learn from internet data in nondemocracies?. *PS: Political Science & Politics, 46*(2), 262-270.
- Griffiths, J. (2021). *The great firewall of China: How to build and control an alternative version of the internet*. London, UK: Bloomsbury Publishing.
- Gunitsky, S. (2015). Corrupting the cyber-commons: Social media as a tool of autocratic stability. *Perspectives on Politics, 13*(1), 42-54.
- Guriev, S., & Treisman, D. (2019). Informational autocrats. *Journal of Economic Perspectives, 33*(4), 100-127.
- Han, R. (2015). Defending the authoritarian regime online: China's "voluntary fifty-cent army". *The China Quarterly, 224*, 1006-1025.
- Harwit, E., & Clark, D. (2001). Shaping the internet in China. Evolution of political control over network infrastructure and content. *Asian Survey, 41*(3), 377-408.
- Heerwegh, D., & Loosveldt, G. (2006). An experimental study on the effects of

- personalization, survey length statements, progress indicators, and survey sponsor logos in web surveys. *Journal of Official Statistics*, 22(2), 191.
- Hobbs, W. R., & Roberts, M. E. (2018). How sudden censorship can increase access to information. *American Political Science Review*, 112(3), 621-636.
- Huang, H. (2015). Propaganda as signaling. *Comparative Politics*, 47(4), 419-444.
- Huang, H. (2018). The pathology of hard propaganda. *The Journal of Politics*, 80(3), 1034-1038.
- Huang, H., Wang, F., & Shao, L. (2018). How propaganda moderates the influence of opinion leaders on social media in China. *International Journal of Communication*, 12(2018), 2599-2621.
- Hwang, H., Kim, Y., & Kim, Y. (2018). Influence of discussion incivility on deliberation: An examination of the mediating role of moral indignation. *Communication Research*, 45(2), 213-240.
- Jiang, M. (2010). Authoritarian informationalism: China's approach to Internet sovereignty. *SAIS Review of International Affairs*, 30(2), 71-89.
- Jiang, Y. (2014). 'Reversed agenda-setting effects' in China case studies of Weibo trending topics and the effects on state-owned media in China. *Journal of International Communication*, 20(2), 168-183.
- Kalathil, S., & Boas, T. C. (2001). The Internet and state control in authoritarian regimes. *First Monday*. Retrieve from: <https://firstmonday.org/ojs/index.php/fm/article/download/876/785?inline=1>
- Kees, J., Berry, C., Burton, S., & Sheehan, K. (2017). An analysis of data quality:

- Professional panels, student subject pools, and Amazon's Mechanical Turk. *Journal of Advertising*, 46(1), 141-155.
- Kennedy, R., Clifford, S., Burleigh, T., Waggoner, P. D., Jewell, R., & Winter, N. J. (2020). The shape of and solutions to the MTurk quality crisis. *Political Science Research and Methods*, 8(4), 614-629.
- King, G., Pan, J., & Roberts, M. E. (2013). How censorship in China allows government criticism but silences collective expression. *American Political Science Review*, 107(2), 326-343.
- King, G., Pan, J., & Roberts, M. E. (2017). How the Chinese government fabricates social media posts for strategic distraction, not engaged argument. *American Political Science Review*, 111(3), 484-501.
- Koiranen, I., Koivula, A., Malinen, S., & Keipi, T. (2021). Undercurrents of echo chambers and flame wars: Party political correlates of social media behavior. *Journal of Information Technology & Politics*, 1-17.
- Li, X., Shi, W., & Zhu, B. (2018). The face of internet recruitment: Evaluating the labor markets of online crowdsourcing platforms in China. *Research & Politics*, 5(1), 1-8.
- Li, Y., Qian, M., Jin, D., Hui, P., & Vasilakos, A. V. (2015). Revealing the efficiency of information diffusion in online social networks of microblog. *Information Sciences*, 293, 383-389.
- Liu, H. (2019). *Propaganda: Ideas, Discourses and Its Legitimization*. London, UK: Routledge.
- Lorentzen, P. (2014). China's strategic censorship. *American Journal of Political*

- Science*, 58(2), 402-414.
- Lu, J., Aldrich, J., & Shi, T. (2014). Revisiting media effects in authoritarian societies. *Politics and Society*, 42, 253-283.
- Lu, Y., & Pan, J. (2021). Capturing clicks: How the Chinese government uses clickbait to compete for visibility. *Political Communication*, 38(1-2), 23-54.
- Lu, Y., Pan, J., & Xu, Y. (2021). Online criticism and support for the Chinese government in the early days of COVID-19. *21st Century China Center Research Paper*, 4.
- Luca, M. (2015). User-generated content and social media. In S. P. Anderson, J. Waldfogel and D. Strömberg (Ed.). *Handbook of media Economics* (Vol. 1, pp. 563-592). Amsterdam, Netherlands: Elsevier.
- MacKinnon, R. (2008). Flatter world and thicker walls? Blogs, censorship and civic discourse in China. *Public Choice*, 134(1), 31-46.
- Markham, T. (2014). Social media, protest cultures and political subjectivities of the Arab spring. *Media, Culture & Society*, 36(1), 89-104.
- Marolt, P. (2011). Grassroots agency in a civil sphere? Rethinking internet control in China. In D. K. Herold and P. Marolt (Ed.). *Online society in China: Creating, celebrating, and instrumentalising the online carnival* (pp. 65-80). London, UK: Routledge.
- McKune, S., & Ahmed, S. (2018). The contestation and shaping of cyber norms through China's internet sovereignty agenda. *International Journal of Communication*, 12(2018), 3835-3855.
- Mercer, A., Caporaso, A., Cantor, D., & Townsend, R. (2015). How much gets you how much? Monetary incentives and response rates in household surveys. *Public Opinion*

- Quarterly*, 79(1), 105-129.
- Miller, B. (2016). Automated detection of Chinese government astroturfers using network and social metadata. *Available at SSRN 2738325*.
- Norris, P. (2012). Political mobilization and social networks. The example of the Arab spring. in N. Kersting (Ed.). *Electronic democracy* (pp. 53-76). Opladen, Leverkusen, Germany: Verlag Barbara Budrich.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45(4), 867-872.
- Östman, J. (2012). Information, expression, participation: How involvement in user-generated content relates to democratic engagement among young people. *New Media & Society*, 14(6), 1004-1021.
- Pan, J. (2017). How market dynamics of domestic and foreign social media firms shape strategies of internet censorship. *Problems of Post-Communism*, 64(3-4), 167-188.
- Pan, J., & Siegel, A. A. (2020). How Saudi crackdowns fail to silence online dissent. *American Political Science Review*, 114(1), 109-125.
- Pan, J., Shao, Z., & Xu, Y. (2020). The effects of television news propaganda: Experimental evidence from China. *Available at SSRN 3579148*.
- Pang, H. (2018). Can microblogs motivate involvement in civic and political life? Examining uses, gratifications and social outcomes among Chinese youth. *Online Information Review*, 42(5), 663-680.
- Qiang, X. (2011). Liberation technology: The battle for the Chinese internet. *Journal of*

- Democracy*, 22(2), 47-61.
- Qin, B., Strömberg, D., & Wu, Y. (2017). Why does China allow freer social media? Protests versus surveillance and propaganda. *Journal of Economic Perspectives*, 31(1), 117-40.
- Rauchfleisch, A., & Schäfer, M. S. (2015). Multiple public spheres of Weibo: A typology of forms and potentials of online public spheres in China. *Information, Communication & Society*, 18(2), 139-155.
- Repnikova, M., & Fang, K. (2018). Authoritarian participatory persuasion 2.0: Netizens as thought work collaborators in China. *Journal of Contemporary China*, 27(113), 763-779.
- Reuter, O. J., & Szakonyi, D. (2015). Online social media and political awareness in authoritarian regimes. *British Journal of Political Science*, 45(1), 29-51.
- Rheault, L., Rayment, E., & Musulan, A. (2019). Politicians in the line of fire: Incivility and the treatment of women on social media. *Research & Politics*, 6(1), 1-7.
- Roberts, M. E. (2018). *Censored: Distraction and diversion inside China's Great Firewall*. Princeton, NJ, USA: Princeton University Press.
- Roberts, M. E. (2020). Resilience to online censorship. *Annual Review of Political Science*, 23, 401-419.
- Rød, E. G., & Weidmann, N. B. (2015). Empowering activists or autocrats? The internet in authoritarian regimes. *Journal of Peace Research*, 52(3), 338-351.
- Rosenfeld, B. (2018). The popularity costs of economic crisis under electoral authoritarianism: Evidence from Russia. *American Journal of Political Science*, 62(2), 382-397.
- Rozenas, A., & Stukal, D. (2019). How autocrats manipulate economic news: Evidence from

- Russia's state-controlled television. *The Journal of Politics*, 81(3), 982-996.
- Sakshaug, J. W., & Crawford, S. D. (2010). The impact of textual messages of encouragement on web survey breakoffs: An experiment. *International Journal of Internet Science*, 4(1), 50-60.
- Salvatore, A. (2014). A public sphere revolution? Social media versus authoritarian regimes. In L. Sadiki (Ed.). *Routledge Handbook of the Arab Spring* (pp. 381-391). London, UK: Routledge.
- Sarraf, S., & Tukibayeva, M. (2014). Survey page length and progress indicators: What are their relationships to item nonresponse?. *New Directions for Institutional Research*, 2014(161), 83-97.
- Shambaugh, D. (2017). China's propaganda system: Institutions, processes and efficacy. In K. E. Brodsgaard (Ed.). *Critical Readings on the Communist Party of China (4 Vols. Set)* (pp. 713-751). Leiden, Netherlands: Brill.
- Shaw, M. J., Beebe, T. J., Jensen, H. L., & Adlis, S. A. (2001). The use of monetary incentives in a community survey: Impact on response rates, data quality, and cost. *Health Services Research*, 35(6), 1339-1346.
- Shirky, C. (2011). The political power of social media: Technology, the public sphere, and political change. *Foreign affairs*, 90(1), 28-41.
- Smidi, A., & Shahin, S. (2017). Social media and social mobilisation in the Middle East: A survey of research on the Arab Spring. *India Quarterly*, 73(2), 196-209.
- Stanley, J. W., & Weare, C. (2004). The effects of internet use on political participation: Evidence from an agency online discussion forum. *Administration & Society*, 36(5),



503-527.

Steinert-Threlkeld, Z. C. (2017). Spontaneous collective action: Peripheral mobilization during the Arab Spring. *American Political Science Review*, *111*(2), 379-403.

Stevenson, C. (2007). Breaching the great firewall: China's internet censorship and the quest for freedom of expression in a connected world. *BC Int'l & Comp. L. Rev.*, *30*(2), 531-558.

Stockmann, D. (2010). Who believes propaganda? Media effects during the anti-Japanese protests in Beijing. *The China Quarterly*, *202*, 269-289.

Stockmann, D. (2013). *Media commercialization and authoritarian rule in China*. Cambridge, UK: Cambridge University Press.

Stockmann, D., & Gallagher, M. E. (2011). Remote control: How the media sustain authoritarian rule in China. *Comparative Political Studies*, *44*(4), 436-467.

Stockmann, D., & Luo, T. (2015). Authoritarianism 2.0: Social media and political discussion in China. *Available at SSRN 2650341*.

Stockmann, D., & Luo, T. (2017). Which social media facilitate online public opinion in China?. *Problems of Post-Communism*, *64*(3-4), 189-202.

Stockmann, D., & Luo, T. (2019). Authoritarian deliberation 2.0: Lurking and discussing politics in Chinese social media. in M. X. Delli Carpini (Ed.). *Digital Media and Democratic Futures* (pp.169-195). Pennsylvania, US: University of Pennsylvania Press.

Stockmann, D., Luo, T., & Shen, M. (2020). Designing authoritarian deliberation: How social media platforms influence political talk in China. *Democratization*, *27*(2), 243-264.

Stukal, D., Sanovich, S., Bonneau, R., & Tucker, J. A. (2022). Why Botter: How

- Pro-Government Bots Fight Opposition in Russia. *American Political Science Review*, 1-15.
- Su, L. Y. F., Xenos, M. A., Rose, K. M., Wirz, C., Scheufele, D. A., & Brossard, D. (2018). Uncivil and personal? Comparing patterns of incivility in comments on the Facebook pages of news outlets. *New Media & Society*, 20(10), 3678-3699.
- Tai, Q. (2014). China's media censorship: A dynamic and diversified regime. *Journal of East Asian Studies*, 14(2), 185-210.
- Tucker, J. A., Theodoridis, Y., Roberts, M. E., & Barberá, P. (2017). From liberation to turmoil: Social media and democracy. *Journal of Democracy*, 28(4), 46-59.
- Valenzuela, S., Kim, Y., & Gil de Zúñiga, H. (2012). Social networks that matter: Exploring the role of political discussion for online political participation. *International Journal of Public Opinion Research*, 24(2), 163-184.
- Verbree, A. R., Toepoel, V., & Perada, D. (2020). The effect of seriousness and device use on data quality. *Social Science Computer Review*, 38(6), 720-738.
- Villar, A., Callegaro, M., & Yang, Y. (2013). Where am I? A meta-analysis of experiments on the effects of progress indicators for web surveys. *Social Science Computer Review*, 31(6), 744-762.
- Vuori, J. A., & Paltemaa, L. (2015). The lexicon of fear: Chinese internet control practice in Sina Weibo microblog censorship. *Surveillance & Society*, 13(3/4), 400-421.
- Weiss, J. C., & Dafoe, A. (2019). Authoritarian audiences, rhetoric, and propaganda in international crises: Evidence from China. *International Studies Quarterly*, 63(4), 963-973.

- Wong, S. H. W., & Liang, J. (2021). Dubious until officially censored: Effects of online censorship exposure on viewers' attitudes in authoritarian regimes. *Journal of Information Technology & Politics*, 18(3), 310-323.
- Xu, B., & Albert, E. (2014). Media censorship in China. *Council on Foreign Relations*, 25, 1-6.
- Xu, J., & Sun, W. (2021). Propaganda innovation and resilient governance: The case of China's smog crisis. *Media Asia*, 48(3), 175-189.
- Yamamoto, M., Kushin, M. J., & Dalisay, F. (2015). Social media and mobiles as political mobilization forces for young adults: Examining the moderating role of online political expression in political participation. *New Media & Society*, 17(6), 880-898.
- Yang, G. (2009). *The power of the Internet in China: Citizen activism online*. New York, US: Columbia University Press.
- Yang, G. (2014). The return of ideology and the future of Chinese Internet policy. *Critical Studies in Media Communication*, 31(2), 109-113.
- Yang, Y. (2021). When positive energy meets satirical feminist backfire: Hashtag activism during the COVID-19 outbreak in China. *Global Media and China, Special Issue Article*, 1-21.
- Zagorsky, J. L., & Rhoton, P. (2008). The effects of promised monetary incentives on attrition in a long-term panel survey. *Public Opinion Quarterly*, 72(3), 502-513.
- Zhang, L. L. (2006). Behind the 'Great Firewall' decoding China's internet media policies from the inside. *Convergence*, 12(3), 271-291.
- Zhao, A., & DeDeo, S. (2020). Computational propaganda on social media where 404 Not

Found: How Chinese political astroturf flooding on Twitter. *SocArXiv Papers*. 1-31.

Retrieved from: <https://osf.io/preprints/socarxiv/6p53v/>

## **Chapter 2: Curiosity Killed the Echo Chamber: Investigating Chinese Netizens'**

### **Responses to Critical Comments Against the Government**

#### **Abstract**

In contrast to the conventional knowledge that authoritarian regimes have absolute control over the media, studies have revealed that these regimes deliberately allow a somewhat free media environment to monitor the masses' sentiment. However, this type of "breathing space" may induce freely expressed criticism to the regimes as well. Thus, regimes often engage with citizens in different media outlets and spread state ideology with the expectation of strengthening public support for the regime. In the context of China, Chinese social media platforms are generally fraught with two competing voices: pro-government discourses, promoted by the government, and nonpropagandistic deliberations, expressed by ordinary citizens. This study empirically examines whether these "soft propaganda" succeed in directing public opinion. Using an online survey and an embedded survey experiment, this study finds that Chinese netizens do not accept the state's propaganda passively or mechanically. They self-select to expose themselves to comments that deviate from the official discourses over time. In addition, the presence of online comments makes citizens more critical, indicating that exposure to diverse comments may reduce people's policy support. These findings suggest that the effectiveness of online propaganda may be overestimated and regime legitimacy may be threatened by unorthodox online discussions.

*Keywords:* Soft propaganda, selective exposure, online comments, policy approval, regime

legitimacy, China

## **1. Introduction**

Media in authoritarian regimes are under strict control. Their governments typically use censorship to prevent exposure to harmful information. Nevertheless, censorship can also force the media to disseminate nothing but compliments to government officials or news that reports great achievements of the regime. Such official propaganda—also known as hard propaganda—is not always an effective technique to harvest citizens’ regime support owing to its one-sidedness, which makes the propaganda content exaggerated and fictitious. The credibility of this content thereby decreases (Huang, 2018). Hence, the regimes also employ soft propaganda to guide public opinion (Huang, 2015, p.419). Rather than completely blocking all types of harmful information, these governments allow for some “breathing space” in the online sphere, where netizens can browse and discuss some controversial issues (Egorov, Guriev, & Sonin, 2009; Qin, Strömberg, & Wu, 2017).

Under the aforementioned circumstances, some discussion may turn into criticism of the government and its policies. The government would then neutralize these regime critics by recruiting undercover commenters (King, Pan, & Roberts, 2017; Gunitsky, 2015) and by mobilizing regime supporters to leave comments that praise the success of the regime (Han, 2015a, 2015b). In addition, the government would amplify the voices of patriots who cheer for the bright side of the regime (Fang & Repnikova, 2018). This approach is potentially more influential because compared with one-sided propaganda, lively online discussions look more authentic and trustworthy.

As a state with tight control of the Internet, China proactively utilizes the soft propaganda technique to direct its masses' opinions. Recent studies have provided suggestive evidence for its effectiveness. For example, some have noted that nationalist sentiment is rising on the Chinese Internet (Jiang, 2012; Hyun, Kim, & Sun, 2014). Others have noted the emergence and proliferation of “little pinks” and “volunteer 50-cent members” (*zi gan wu*)—netizens voluntarily defend the regime when encountering words that badmouth the regime (Lu, 2013; Fang & Repnikova, 2018; King, Pan, & Roberts, 2017). There are also “wolf warriors,” who go to great lengths to bypass the “Great Firewall,” so that they can visit banned foreign social media and rebut foreigners who have issues with China (Teixeira, 2020; Costigan & Xin, 2020; Dettmer, 2020).

Although the aforementioned examples appear to demonstrate the Chinese government's success in influencing public opinion, empirical evidence remains somewhat absent. In this study, we attempt to fill the gap in knowledge by answering two questions: (1) Do pro-regime comments attract ordinary Chinese netizens, or are they distracted by comments critical of the government? (2) Does the presence of an online “breathing space” make citizens more supportive of the regime?

The first question was answered on the basis of the outcome of an online survey tracking Chinese social media users' self-selected comment exposure over time. To answer the second question, we devised an embedded online experiment to examine whether the netizens' policy

support changes in the absence of online comment exposure. Online comments in the survey were curated from the Comments section of *Sina Weibo*,<sup>1</sup> which is one of the most popular and most regulated social media platforms in China (Fu, Chan, & Chau, 2013; Vuori & Paltemaa, 2015; Stockmann & Luo, 2017).

Our empirical results suggest that when survey respondents are given an option, they are inclined to expose themselves to comments that hold critical views on the regime over comments more supportive of the regime. Moreover, those who do not have any access to comments significantly agree with the underlying policies compared with their counterparts who are able to enjoy a “breathing space.”

The current findings expand the understanding of online propaganda and information manipulation in authoritarian regimes. Although the Chinese authorities have gone to great lengths to shape public opinion through cajoling and coercion to their own favor, ordinary Chinese netizens may not passively and mechanically accept soft propaganda, particularly when they are granted access to comments deviating from the propaganda, nor are they mindless information recipients who would expose themselves to state-promoted propaganda. A strictly regulated media environment may not reduce netizens’ demand for alternative information. In addition, the presence of a “breathing space” may impair the public’s support for a regime thereby weakening the regime’s legitimacy. This could be a possible reason that the Chinese government, despite adopting soft propaganda, has not discarded the use of hard

---

<sup>1</sup> Hereafter, the terms *Sina Weibo* and *Weibo* are used interchangeably.



ensorship to control the media.

## **2. Literature Review**

Social media is key in political communication because of which many authoritarian regimes impose rigorous controls over the Internet (Boas, 2006). Although some scholars have argued that social media can serve as liberalization technology that promotes democratization in authoritarian regimes (Diamond, 2010; Lynch, 2011; Lei, 2011; Breuer, Landman, & Farquhar, 2015), others have indicated that nondemocratic countries are able to co-opt social media to reinforce state ideology and strengthen authoritarianism through information control and manipulation (Shirky, 2011; Morozov, 2012; MacKinnon, 2011; Göbel, 2013; Creemers, 2017).

There are two recognized approaches to manipulating online information in China (Chen & Xu, 2017). The first one is censorship (King, Pan, & Roberts, 2013), where online content that deemed unfavorable to the regime is deleted by the authorities. It aims to prevent netizens from accessing content that is harmful to the regime (Bamman, O'Connor, & Smith 2012). The second approach is less conspicuous, where social media is utilized as a tool to reinforce regime legitimacy (Gunitsky, 2015; Lu & Shi, 2015). Studies have suggested that the Chinese government employs commenters to post online comments advocating for the interest of the party-state (Han, 2015a, 2015b). These comments—also known as 50-cent (or *shui jun*) comments—appear to be genuine voices from ordinary netizens but they are carefully crafted by the authorities for propaganda purposes (Deibert & Rohozinski, 2010;

Bremmer, 2010; Miller, 2016; King, Pan, & Roberts, 2017). Such soft propaganda may subtly and tactfully influence the public and convince people to accept authoritarian values (Hung, 2010; Greitens, 2013; Huang, 2015).

In addition to the aforementioned approach, the government may proactively absorb the discourses of regime supporters and patriots into its propaganda campaign. Recent studies have identified the emergence of “little pink”—a group of ordinary Chinese citizens who are keen to speak out their fervent and loyal support for the regime (Fang & Repnikova, 2018). Through raising the voices of these patriots and filtering out the voices of dissenters, the government can turn patriotic netizens into “thought work collaborators” (Hung, 2010, Repnikova & Fang, 2018, p.763).

Extant studies have focused on identifying pro-regime comments produced through astroturfing (Miller, 2016; King, Pan, & Roberts, 2017); however, they have not investigated the effects of fabricated and filtered comments on netizens. In this study, we focus on two outcome variables of interest: individuals’ selective exposure to different online comments as well as the effects of online discussions on the individuals’ political attitudes toward regime legitimacy.

### **3. Theories and Hypotheses**

#### *3.1 Online Comments as an Echo Chamber*

Some scholars observe that a rise in nationalism along with tight ideology controls have

polarized China's online space into a battleground between two camps—one with those who firmly support the regime and the other with those who dissent from the government (Chase & Mulvenon, 2002; Yang, 2014; Zhao, 2016; Wu, 2013; Pan & Xu, 2018; Yang & Tang, 2018). The increasingly nationalistic sentiment is also partly owing to prolonged, nationwide patriotic education (Hyun & Kim, 2015; Lu & Shi, 2015; Zhao, 1998; Tsang, 2009). Enthusiastic party-state ideology supporters are frequently found in China's cyberspace. Whenever there is an international dispute, conflict, and tension between China and other countries such as the United States or Japan, these supporters become more vocal on many Chinese social media platforms with their voices defending China. This phenomenon is becoming particularly noticeable (Qiu, 2006). Even well-educated and informed individuals in China may hold strong anti-Western and nationalistic values (Zhou, 2005). If that is the case, Chinese netizens may experience the “echo chamber effect”—whereby people tend to consume information conforming with their preexisting beliefs and avoid alternative perspectives inconsistent with their own ideas (Colleoni, Rozza, & Arvidsson, 2014; Chan & Fu, 2017, Wong & Wong, 2020).

The assumption underlying echo chamber effect theory is that people have limited cognitive resources; they do not have infinite time and patience to view all different perspectives from all sides, so they will, instead, simply search for information that can strengthen, rather than criticize or challenge, their pre-existing opinions and own beliefs (Garrett, 2009; Stroud, 2010; Arceneaux, Johnson, & Murphy, 2012; O'Hara & Stevens, 2015). If such assumption applies to Chinese social media users, we expect to detect selective

exposure to information among them—regime supporters favor content that defends the regime, whereas others prefer messages critical of it. Thus, our first hypothesis is as follows:

Hypothesis 1: *Netizens tend to expose themselves to online information with similar ideological content given the constraints of time or cognitive resources.*

### *3.2 Online Comments as an Alternative Information Source*

Although some scholars have considered that the nationalism sentiment is prevalent in China's cyberspace, others have indicated that social media in China has already become a public sphere for citizens to obtain information about government officials and social issues (Shirky, 2011; Nip & Fu, 2016). Lei (2011) finds that Chinese netizens are more supportive of norms of democracy and usually hold a more critical view of Chinese political conditions. Tong and Lei (2013) indicate that Chinese citizens would proactively look for counter-hegemony discourses, rather than prosaic propaganda, on the Internet so as to better supervise local government officials. Wang (2013) also argues that even when there is a controversial issue about whether the government has failed to uphold social justice, netizens do not simply fall for pro-official discourses but are able to view different arguments and objectively evaluate if the government should be held accountable for the issue. In summary, despite a highly controlled online environment, netizens consider online space as a source for accessing alternative information, which makes them more informed (Yang, 2009; Zhu, Lu, & Shi, 2013; Lu, 2014).

Chen and Yang (2019) also provide empirical evidence that Chinese people's demand for uncensored information increased after they are incentivized to access such information. Moreover, Hobbs and Roberts (2018) suggest that a sudden block of information boosts individuals' willingness to seek the blocked content. Because state-facilitated astroturfing comments uniformly praise the government and show support for policies, exclusive exposure to this type of comments is de facto censorship of other counter-official discourses, which may motivate netizens to search for alternative information. The aforementioned empirical findings further corroborate the argument that individuals in authoritarian regimes are susceptible to a considerable amount of government influence. Their political awareness allows them to distinguish reality from official discourses as well as resist official propaganda (Geddes & Zaller, 1989). When citizens acquire political information and evaluate the government's competence, they can also rely on multiple media sources other than the official media channel (Lu, 2013, 2014). Therefore, given these factors, even if individuals' time is precious, they may still choose to view multiple sources of information. We thus hypothesize the following:

Hypothesis 2: *Netizens tend to expose themselves to online information that deviates from the official discourse despite time or cognitive resource constraints.*

### *3.3 Effects of Online Comments on Regime Legitimacy*

A main reason that authoritarian regime authorities allow for the existence of the "breathing space" on the Internet is that they are supposedly able to influence public opinion or even

agitate for regime support using soft propaganda in this “breathing space.” However, this may not be the case in reality.

Framing effect theory suggests that exposure to different framings affects individuals’ political attitudes (Iyengar & Simon, 1993). Online deliberations contain all types of arguments and framings of certain issues. Exposure to these varying perspectives provides individuals with a chance to see competing views or ideas that they are unaware of previously. In other words, exposure to alternative information can stimulate individuals’ critical thinking, thereby changing their political attitudes regarding certain issues (Druckman, 2004; Wang, 2013; Lu, Aldrich, & Shi, 2014; Tang & Huhe, 2014).

This exposure effect is detectable even in the Chinese context. China has almost never experienced Western-style democracy in its history. Even in the modern times, channels for Chinese citizens to directly choose their own political leaders beyond villages are limited due to China’s authoritarianism. Therefore, accepting the political status quo instead of challenging it—which may invite some political risks—seems to be the conventional choice for Chinese citizens. This high acceptance is culturally oriented because Chinese people have historically been viewing the government as the head of a large family, and therefore, they believe that they should obey its orders and follow its decisions (Shi, 2001). Years of state-facilitated propaganda also plays a crucial role in making citizens hold a generally supportive attitude toward the regime (Lu & Shi, 2015; Esarey, Stockmann, & Zhang, 2017). However, Chinese citizens’ attitude as well as their acceptance of the political condition are

not solely driven by fear and scruples about the authorities. The economic performance in the reform area grants party-state political legitimacy. As shown by some empirical works, Chinese people have a high level of trust in their central government despite its strict control over society (Wang, 2005; Li, 2016; Yang & Tang, 2010; Chen, 2017). Moreover, Chinese people generally believe that official policies implemented by the central government are for the genuine benefit of the citizens (Li, 2004; Lu, 2014). In other words, if Chinese citizens' awareness of diverse viewpoints is not aroused by alternative framings, they are likely to support the regime. Therefore, our third hypothesis is as follows:

Hypothesis 3: *Individuals who lack access to online comments tend to show more policy support compared with individuals who have this access.*

Note that Hypothesis 3 is related to policy support, rather than regime support, because measuring regime support is problematic given its politically sensitive nature: A survey containing questions that directly ask for citizens' attitudes toward their regime or government is likely to be censored. Moreover, even after the approval of the government, survey respondents may also have concerns about whether their answers may lead to potential risks for them. Therefore, their answers may not be as truthful as expected (Kuran, 1997; Krumpal, 2013; Lei & Lu, 2017). To solve the problem with social desirability bias, an indirect measure is needed (Fisher, 1993). To measure individuals' support for state-proposed policies may be a solution, because in most authoritarian regimes, the policy-making process is almost dominated by the ruling party. The proposed policies not only convey the will of the

state but also represent its interests. In this case, the level of policy support among citizens can be considered an indicator that reflects citizens' overall regime support to some degree (Chen, Zhong, & Hillard, 1997; Chen, Zhong, Hillard, & Scheb, 1997; Tang & Huhe, 2014; Lü, 2014). Hence, here, we compared respondents' policy support between respondents with access to online comments regarding the policies and their counterparts who do not have such access. However, Chinese citizens' regime support might vary at different hierarchy levels; citizens tend to show more support for their central government but less support for their local governments (Li, 2004, 2016). In addition, people in different provinces and cities demonstrate different levels of support for local governments. Because our sample contains respondents from 31 provinces in China, using policies that are only applicable to a specific region would have introduced bias in our experiment. Therefore, in the current survey, we selected policies implemented nationwide. In other words, the policies used for the experiment are applicable to all Chinese citizens, regardless of where they are located within the country. Nevertheless, we acknowledge that respondents' policy support is only one of the many indicators of their regime support—a concept that likely includes other elements than policy support.

## **4. Research Design**

### *4.1 Comments on Sina Weibo*

Although the Chinese government strictly forbids insults to the regime or political leaders on the Internet, political satire, sarcasm, and poignant comments are seen often. The coexistence of pro-regime and regime-challenging comments is ubiquitous on many Chinese social media



platforms. Although, in theory, netizens can freely select whichever content they would like to view and can expose themselves to both types of comments, the Chinese government has put much effort into highlighting the pro-regime comments under the “Comments section” (*ping lun qu*) as a means to direct public opinion (King, Pan, & Roberts, 2017). *Sina Weibo* is a typical example of a social media platform used for this purpose. If a *Weibo* post contains content talking about social policies, ongoing social events, or government officials’ wrongdoings, under its Comments section, it will have the label “Comments recommended by the account holder.” These so-called recommended comments are principally pro-regime comments. This function allows the government to endorse and promote pro-regime discourses from the grassroots (Repnikova & Fang, 2018).

Figure 1 illustrates a *Weibo* post reporting that the Beijing Radio and Television Administration released an article on its official website emphasizing the strict implementation of the broadcasting censorship policy. The article also required the show producers to strengthen the aesthetic orientation of artistic creation by eradicating the aesthetic appreciation of “sissiness” (*niang pao*) when selecting actors, deciding performance styles, and choosing costumes while refusing to participate in the publicity of the sissy style.

Comments under the Comments section of this post, as shown in Figure 2, are those agreeing with the policy. For instance, the first comment says that the commenter supports the policy and hopes that in the future no male celebrity can be the advertising endorser of any cosmetics brand. The second comment also says that the commenter supports this policy

and thinks that many male celebrities put on so much makeup that their face is whiter than flour. The third and fourth comments are rather objective, asking that if there is any standard for the policy and suggesting that the policy should be implemented with care. The fifth comment says that “male mothers” and “male wives” should also be banned. The rest of the comments are only indicating their support with phrases such as “support” or “well done.”

For accessing critical comments from netizens, however, a *Weibo* user has to navigate to a different section of the post. *Weibo* has a button called “Repost” (*zhuan fa*), which is similar to the “Retweet” button on Twitter. The Repost button allows users to share the post on their personal *Weibo* page. The users can also comment on the shared post and find out what others have shared and said about the post by clicking the “Repost” button under that post. As shown in Figure 3, the comments under the Repost section are evidently more critical and satirical than those in the Comments section (Figure 2). For instance, the first comment under the Repost section says that the policy is a step backward, an insult to all women, and a silent support for and encouragement of bullying in school. One commenter says that he/she cannot understand this policy, and the last commenter on the bottom even directly criticizes that the account holder uses the *Recommended Comment* function to manipulate the Comments section. Under these comments, there is a phrase with a button saying “Above are reposted comments in the hotspot. View more,” suggesting that if a user clicks this button, they can even see more reposted comments from other netizens.

Fig 1. A Sina Weibo Post on Eradicating the Aesthetic Appreciation of Sissiness



Fig 2. Comments Section of the Sina Weibo Post



Fig 3. Repost Section of the Sina Weibo Post

< 返回  中国新闻网 ...

转发 11.2万 评论 1.6万 赞 9.2万

---

// :是时代的倒退, 和对女性的侮辱。也是对一部分校园霸凌的鼓励和无声支持。  
9-18 18:11 | 转发 9468    2.1万

---

// :在现实中会加重歧视 //  
:// :🤔 // ://  
:// :// :是时代的倒退, 和对女性的侮辱。也是对一部分校园霸凌的鼓励和无声支持。  
9-18 18:09 | 转发 3268    3194

---

就问问能不能也杜绝一下, 邋遢汗臭烟臭, 夏天还不顾市容当街撩衣服露啤酒肚的所谓糙汉审美  
  
9-18 17:33 | 转发 3044    3.6万

---

广电局能不能做点拟人的事儿? // :👉  
真是太阳刚啦! // :😄//  
:乐// :乐// :玩了  
呀// :笑死了//  
:是时代的倒退, 和对女性的侮辱。也是对一部分校园霸凌的鼓励和无声支持。

---

// :说过很多次了, 我依然无法理解  查看图片 // :是时代的倒退, 和对女性的侮辱。也是对一部分校园霸凌的鼓励和无声支持。  
9-18 18:02 | 转发 1229    1434

---

不敢开评论是不是不太阳刚 🤔  
9-19 11:22 | 转发 1202    1.6万

---

// :是时代的倒退, 和对女性的侮辱。也是对一部分校园霸凌的鼓励和无声支持。  
9-18 18:36 | 转发 838    2100

---

精选评论跟控评有区别? 自己精选控评还有脸说清朗? // :是时代的倒退, 和对女性的侮辱。也是对校园霸凌的鼓励和无声支持。  
9-18 16:14 | 转发 836    3993

[更多热门转发 >>](#)

The aforementioned examples have suggested that the design of *Weibo* offers netizens an opportunity to expose themselves to different types of comments. If they click on the Comments section, they can see *recommended* pro-regime comments, which may be produced by astroturfers (*shui jun*) or by “little pinks” or “volunteer 50-cent members.” By contrast, if they click the Repost section, they then can view more critical and satirical opinions expressed by other netizens.

#### 4.2 Online Survey Design

We modeled our survey on the comment choices available to *Weibo* users. All respondents were provided five actual *Weibo* posts, each regarding a somewhat controversial social policy (see Appendix 2 for the exact phrasing of the posts). In addition to the news script itself, they were provided with an opportunity to view one type of comments related to that piece of news. In particular, we provided the respondents with three options: (1) “Recommended comments” (精选评论), (2) “Netizens’ comments” (网友评论), or (3) “Skip comments” (忽略 which meant they chose not to see any comments). The first two options were analogous to *Weibo*’s Comments section and Repost section. We used the term “Recommended comments” to make this option reminiscent of the *Weibo* user experience. Moreover, Chinese social media users are familiar with this term, along with its political connotations, because it can be found on various social media platforms (i.e., *Weibo* and *Wechat*). We did not use the term “Repost” because the survey respondents could not share the survey content with external parties. To indicate that unorthodox voices existed in the Repost section, we labeled the applicable comments as “Netizens’ comments.” To ensure that our respondents could

detect differences in the nuances of recommended and netizens' comments, we included one sample comment next to the respective buttons—differentiating pro-regime comments from those critical of it. Right next to each example comment, we added a button saying, “Click to view more” so as to indicate to the respondents that if they chose that particular option, they would see more similar comments on the next page. From second news piece onward, no example comments were provided to prevent possible biases related to example comments among the respondents. Figure 4 presents an example of the policy news as well as comment options displayed on our survey. The policy is about a regulation stipulating that passengers should not simultaneously purchase tickets for multiple trains with departure times less than 40 minutes apart.

If a respondent clicked the “Recommended comments” button, they could see five pro-policy comments. These comments generally praised the policy or highlighted its importance. If a respondent clicked the Netizens' comments button, they could view five critical comments questioning the feasibility and effectiveness of the policy. These comments were curated from actual comments, with some minor editing, related to the posts (see Appendix 2 for exact phrasing of the comments).

#### Fig 4. First Experimental Question

【火车票购票新规：换乘购票需间隔40分钟以上】记者从中国铁路12306获悉，从9月21日起，购买火车票新增间隔时间限制，通过网络、电话、自动售票机、窗口等方法购买2张或者以上火车票时，乘客所购买的2张车票需间隔40分钟以上，否则出票失败。

17a. 以下是该微博下的博主精选评论以及网友评论，可选择其中之一查看更多相关评论。

[单选题]

- 精选评论：“这样应该是为了能有效防止乘客错过第二班火车吧。”（点击查看更多）
- 网友评论：“这也太不合理了吧？完全不利便民。”（点击查看更多）
- 忽略

On *Weibo*, users can choose to ignore comments about a post by clicking neither the Comment nor the Repost button. Hence, we also provided the Skip comments option to our respondents.

The reason for allowing the respondents to view only one type of comments at a time is that online information seldom originates effortlessly and without any cost. People experience time constraints and have limited cognitive resources. It is impossible for people to browse all types of information online. Thus, they have to constantly decide on the type of information they want to expose themselves to. We may need to force them to make a choice in order to learn their preference for information.

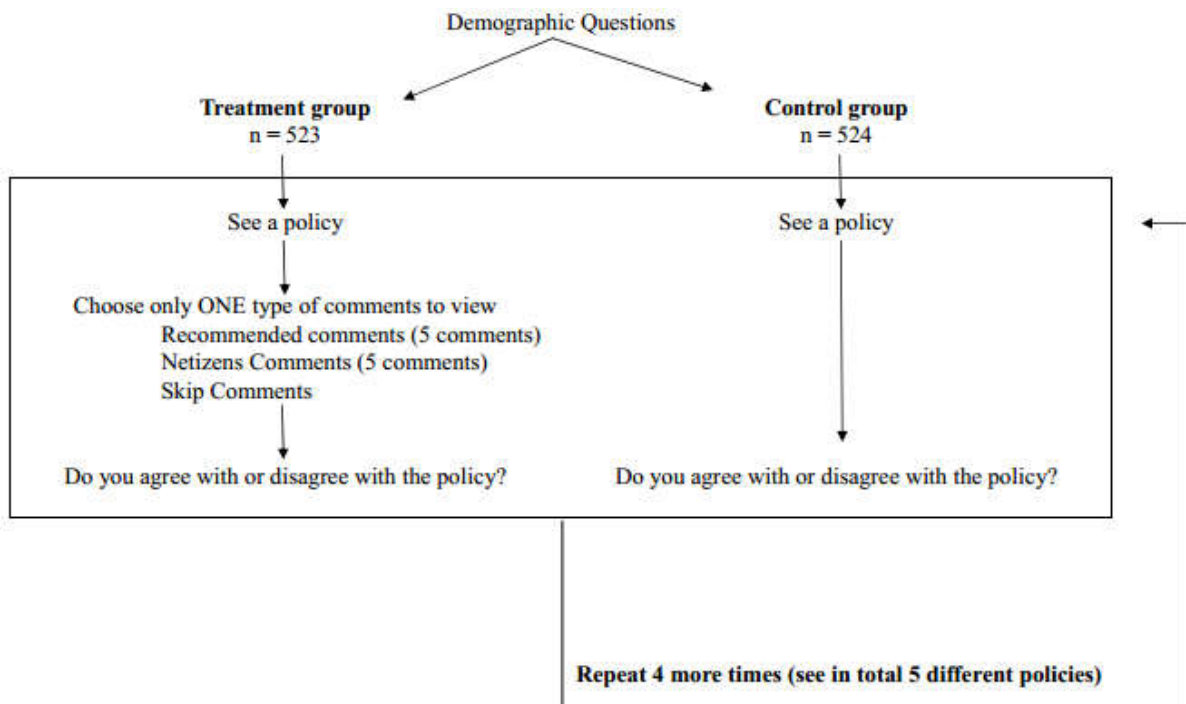
Using quota sampling, we collected survey responses through a well-established survey platform (51diaocha.com) in mainland China by targeting social media users. The sampling quota was based on the actual Chinese demographic distribution according to the 2010 population census of China, and the quota was based on gender, age, educational level, income, and province. We excluded responses with the same IP address and those whose survey completion time is less than 5 minutes (Goodman, Cryder, & Cheema, 2013). We also

included an instrumental manipulation check question in the survey; responses that failed this question were excluded. As such, we could remove low-quality data provided by inattentive respondents (Oppenheimer, Meyvis, & Davidenko, 2009). Eventually, we collected 1047 valid survey respondents and then randomized them into a treatment and a control group; the treatment group contained 523 respondents who could choose the type of comments they wanted to view. The descriptive statistics of this population are presented in Table 1.

Each time, after all respondents viewed a policy, respondents in the treatment group selected a particular type of comments to view. No such step was used for respondents in the control group. Next, the respondents in both the treatment and control groups were asked if they agreed or disagreed with the policy. This question measured respondent approval for each policy—discussed in further detail in Section 5.2. The survey flow is shown in Figure 5.



**Fig 5. Survey Experiment Flow**



## 5. Estimations and Results

### 5.1 Estimations of Comment Choice Over Time

To analyze respondents' comment choice change through five policies (factor variable), we used a random-effects logistic model as well as a multinomial logistic model along with time series analysis and examined the time effects on respondents' comment choice. We regarded their sequential exposures to the five policies as a time series variable  $N_t$  and controlled for respondents' initial comment choices  $A_i$  and  $B_i$  in our model representing their initial comment exposures as *recommended comments* and *netizens' comments*, respectively. The distribution of treatment group respondents' initial choice is presented in Table 6, discussed further in Section 5.2. Their initial comment choice of *skip comments* was the baseline group in the model. The main multinomial logistic specification with *netizens' comments* as the

baseline group compared with *recommended comments* is as follows:

$$Pr\left(Y_{it} = \frac{\text{Recommended Comments}}{\text{Netizens' Comments}}\right) = e^{\alpha_i + \beta N_t + \gamma_1 A_i + \gamma_2 B_i + X_i' \omega + \varepsilon_i} \quad (1)$$

where  $Y_{it}$  denotes the probability of subject  $i$  choosing *recommended comments* at time  $t$  over choosing the baseline category *netizens' comments*,  $\alpha_i$  refers to individual  $i$ 's intercept,  $\beta$  is the coefficient on the time series variable, which is policy number  $N_t = 1, 2, 3, 4, 5$ ,  $\gamma_1$ ,  $\gamma_2$ , and  $\gamma_3$  are coefficients on subjects' initial comment choices  $A_i$  and  $B_i$ ,  $\omega$  is a vector of coefficients on a list of covariates  $X_i$  and  $\varepsilon_i$  is the error term clustered at the individual level and assumed to be independent and identically distributed.

Table 2 presents the multinomial logistic regression results using three comment options as three respective baseline groups for comparison. The coefficient on  $N_t$  in specification 1 is significantly negative, suggesting that compared with *netizens' comments*, respondents were less likely to expose themselves to *recommended comments*. However, because the coefficient on  $N_t$  in specification 2 is nonsignificant, the difference in respondents' comment exposure over time between *skip comments* and *netizens' comments* was therefore nonsignificant.

The results reported in specification 3 mirror those for specification 2 because the baseline group in specification 3 is *recommended comments*. The coefficient on  $N_t$  in specification 3 is significantly positive, indicating that compared with *recommended comments*, the respondents were more likely to expose themselves to *netizens' comments* over

time. The coefficient on  $N_t$  in specification 4 is also nonsignificant, and therefore, the difference between the respondents' comment exposure over time between *skip comments* and *recommended comments* was nonsignificant. Finally, the coefficients on  $N_t$  in specifications 5 and 6 further confirm the results for specifications 2 and 4 that the respondents' choice to view more or less *recommended comments* or *netizens' comments* did not significantly differ from their choice to *skip comments*.

Table 3 reports the results from the random-effects logistic model. Here, the outcome variables of specifications 1, 2, and 3 are dummy variables; they are equal to 1 if respondent  $i$  chose *recommended comments*, *netizens' comments*, and *skip comments*, respectively, or to 0 otherwise. The findings are identical to those of the multinomial logistic model: the coefficient on  $N_t$  in specification 1 is significantly negative, whereas it is significantly positive in specification 2, indicating that over time the respondents were more likely to choose *netizens' comments* over *recommended comments*. Similarly, the coefficient on  $N_t$  in specification 3 is nonsignificant, suggesting nonsignificant differences between respondents' choice of *skip comments* and that of *recommended comments* or *netizens' comments*.

These results, therefore, suggest that instead of continuous exposure to pro-regime comments, respondents' comment exposure leaned toward regime-challenging comments. Consequently, our Hypothesis 1 was rejected, whereas our Hypothesis 2 was accepted.

To visually depict respondents' comment choice variation through the five policy

exposures, we applied a multistate survival model to generate two graphs. The model allowed for the consideration of the respondents' comment choice not only initially but also at each time point thereafter, and it also aided in understanding how it possibly affected their later choice. This model was based on the Markov chain mathematical model, which holds the assumption that the occurrence of the current event depends on the previous event (Gabriel & Neumann, 1962; Whittaker & Thomason, 1994). The model was originally designed to examine the change in patients' conditions under different medical states, with an underlying mechanism that patients' health condition can switch from a starting state, such as a postsurgical state, to a transition state, such as a relapse state, or directly to an absorbing state, such as death (Crowther & Lambert, 2017). We thus referred to the three-state survival model proposed by Crowther and Lambert (2017) and discussed two scenarios in our study: first, starting with the choice of *recommended comments* and ending with that of *netizens' comments*, and second, starting with the choice of *netizens' comments* and ending with that of *recommended comments*. For both scenarios, we considered the choice of *skip comments* as a middle state because we were only interested in the transition of choices between *recommended comments* and *netizens' comments*.

We predicted the transition probability of each scenario (Figure 6): If the respondents chose to view *recommended comments* at the beginning (scenario 1), the probability of them changing their comment exposure to *netizens' comments* increased over time. Almost right after initial exposure to the first policy, we noted a considerable reduction in the size of the white area (probability of staying on *recommended comments*) and a substantial enhancement

in the size of the gray area (probability of staying on *netizens' comments*). Moreover, if respondents chose to see *netizens' comments* in the first place (scenario 2), the probability of them staying exposed to *netizens' comments* was higher than that of them changing their exposure to *recommended comments*—as indicated by the large size of the gray area throughout the first to fifth policy exposure over time. Therefore, the two graphs visually confirm our results, invalidating our Hypothesis 1 but validating our Hypothesis 2—that netizens who choose to view regime-challenging comments are more likely to keep viewing them, whereas those who expose themselves to regime-supportive comments are less likely to continue viewing them but more likely to switch their comment exposure to regime-challenging comments.

Taken together, these results reveal that individuals are able to consume alternative information particularly when the alternative information is more critical, indicating that the authoritarian media control may be less effective than expected (Dubois & Blank, 2018).

**TABLE 1: Descriptive Statistics of Treatment Group Respondent Demographics**

	Obs./Mean	Standard Deviation	Min.	Max.
Number of Respondents	523			
Gender				
Male (obs.)	273			
Female (obs.)	250			
Age (mean)	36.627	8.969	18	56
CCP member (obs.)	64			
Education (mean)	5.031	1.098	2	8
Income (mean)	3.235	1.392	1	8
Political Interest (mean)	3.945	0.750	1	5
Frequency of Social Media News Consumption (mean)	3.394	0.592	1	4
Frequency of Social Media Use (mean)	4.312	0.862	1	5
Most Recent Social Media Use (mean)	6.480	1.452	1	8
Frequency of Social Media Discussion (mean)	2.920	0.676	1	4

*Notes: CCP member* refers to respondents' party affiliation to the Chinese Communist Party. *Education* is measured on an 8-point scale—from 1 (*below primary school*) to 8 (*doctoral*). *Income* is measured on a 9-point scale—from 1 (<RMB20,000) to 9 (>RMB1,000,000). *Political interest* is measured on a 5-point scale—from 1 (*not interested at all*) to 5 (*very interested*). *Frequency of social media news consumption* is measured on a 4-point scale—from 1 (*never*) to 4 (*often*). *Frequency of social media use* is measured on a 5-point scale—from 1 (*never*) to 5 (*everyday*). *Most recent social media use* is measured on an 8-point scale—from 1 (sometime before last year or never) to 8 (*within 1 hour*). *Frequency of social media discussion* is measured on a 4-point scale—from 1 (*never*) to 4 (*often participate*). For the exact phrasing of the questions, see Appendix 1.

**TABLE 2: Choice of Comments Over Time (Multinomial Logistic Regression Model)**

Baseline group as:	Netizens' Comments		Recommended Comments		Skip Comments	
	Recommended Comments (1)	Skip Comments (2)	Netizens' Comments (3)	Skip Comments (4)	Recommended Comments (5)	Netizens Comments (6)
N <sub>t</sub>	-0.082** (0.031)	-0.040 (0.056)	0.082** (0.031)	0.042 (0.056)	-0.042 (0.056)	0.040 (0.056)
Recommended comments as initial choice	1.197** (0.262)	-2.813** (0.312)	-1.197** (0.262)	-4.009** (0.333)	4.009** (0.333)	2.813** (0.312)
Netizens' comments as initial choice	-0.138 (0.271)	-3.062** (0.331)	0.138 (0.271)	-2.924** (0.356)	2.924** (0.356)	3.062** (0.331)
Male	0.110 (0.118)	-0.234 (0.246)	-0.110 (0.118)	-0.344 (0.249)	0.344 (0.249)	0.234 (0.246)
Age	0.016 (0.009)	0.044** (0.015)	-0.016 (0.009)	0.028 (0.015)	-0.028 (0.015)	-0.044** (0.015)
CCP member	0.080 (0.185)	-0.215 (0.377)	-0.080 (0.185)	-0.296 (0.373)	0.296 (0.373)	0.215 (0.377)
Education	0.018 (0.068)	-0.044 (0.126)	-0.018 (0.068)	-0.062 (0.124)	0.062 (0.124)	0.044 (0.126)
Income	-0.077 (0.047)	-0.177 (0.092)	0.077 (0.047)	-0.099 (0.093)	0.099 (0.093)	0.177 (0.092)
Political interest	0.311** (0.099)	-0.394* (0.179)	-0.311** (0.099)	-0.705** (0.194)	0.705** (0.194)	0.394* (0.179)
Frequency of social media news consumption	-0.164 (0.134)	-0.453 (0.287)	0.164 (0.134)	-0.289 (0.290)	0.289 (0.290)	0.453 (0.287)
Frequency of social media use	0.285* (0.123)	0.555** (0.212)	-0.285* (0.123)	0.270 (0.216)	-0.270 (0.216)	-0.555** (0.212)
Most recent social media use	0.012 (0.067)	-0.210 (0.117)	-0.012 (0.067)	-0.223 (0.117)	0.223 (0.117)	0.210 (0.117)
Frequency of social media discussion	-0.026 (0.098)	-0.395 (0.216)	0.026 (0.098)	-0.369 (0.223)	0.369 (0.223)	0.395 (0.216)
Number of Obs.	2615	2615	2615	2615	2615	2615

Pseudo R <sup>2</sup>	0.259	0.259	0.259	0.259	0.259	0.259
Log pseudo-likelihood	-1865.099	-1865.099	-1865.099	-1865.099	-1865.099	-1865.099

*Notes:* Table presents multinomial logistic regression results of respondents' comment choice over time. Dependent variables are respondents' comment choice of *recommended comments*, *netizens' comments*, and *skip comments* at time  $t$  ( $t = 1, 2, 3, 4, 5$ ). Independent variables include policy number  $N_t$  as the time series variable and respondents' comment choice at  $t$  ( $t = 1$ ). Coefficients are reported. Provincial fixed effects and cutoff points are not reported. Standard errors clustered at the individual level are in parentheses.  $**p < .01$ ,  $*p < .05$ .

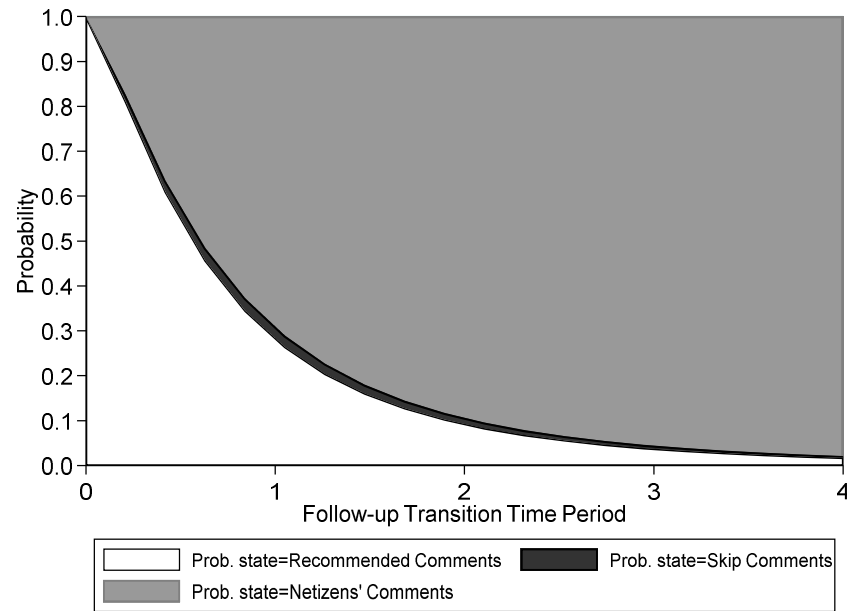


**TABLE 3: Choice of Comments Over Time (Random-Effects Logistic Regression Model)**

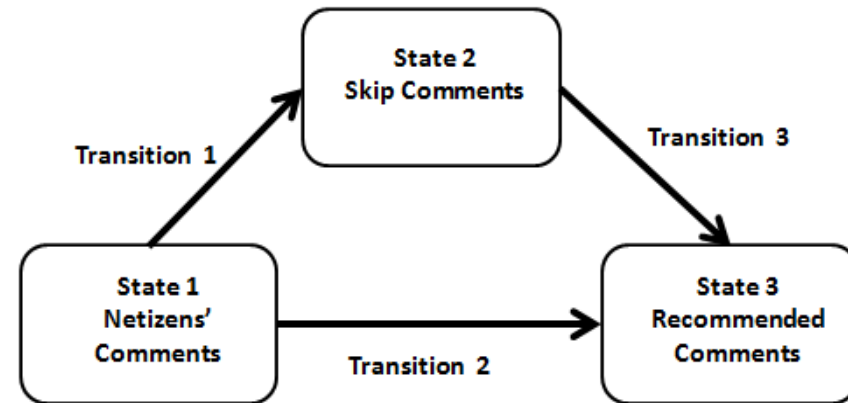
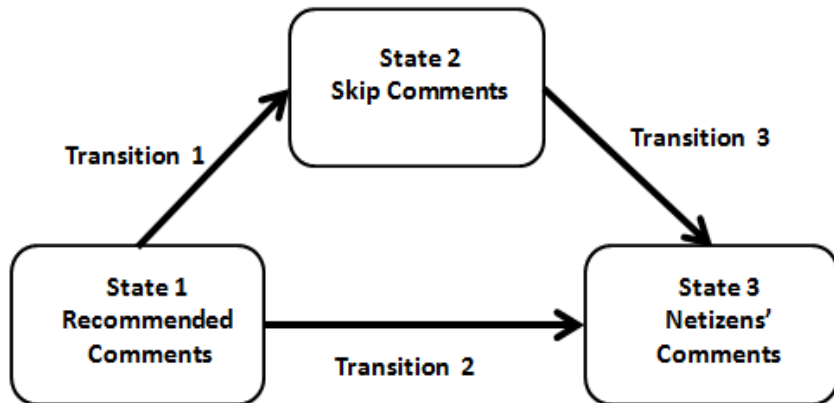
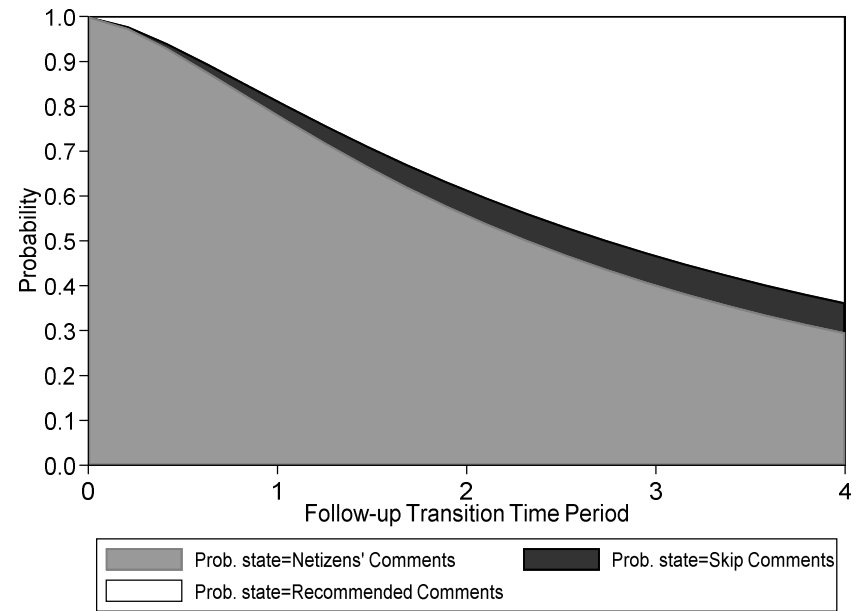
	Recommended Comments (1)	Netizens' Comments (2)	Skip Comments (3)
$N_t$	-0.087* (0.035)	0.084* (0.034)	0.004 (0.074)
Recommended comments as initial choice	2.958** (0.282)	0.449 (0.244)	-5.259** (0.476)
Netizens' comments as initial choice	1.407** (0.280)	1.892** (0.259)	-4.717** (0.512)
Male	0.160 (0.139)	-0.118 (0.130)	-0.236 (0.316)
Age	0.005 (0.010)	-0.028** (0.009)	0.037 (0.020)
CCP member	0.140 (0.214)	-0.039 (0.207)	-0.592 (0.510)
Education	0.020 (0.077)	-0.033 (0.074)	-0.084 (0.162)
Income	-0.048 (0.055)	0.115* (0.052)	-0.241 (0.128)
Political interest	0.429** (0.114)	-0.203* (0.098)	-0.850** (0.242)
Frequency of social media news consumption	-0.101 (0.153)	0.244 (0.143)	-0.400 (0.369)
Frequency of social media use	0.178 (0.141)	-0.334** (0.129)	0.531 (0.287)
Most recent social media use	0.083 (0.077)	0.065 (0.071)	-0.302* (0.151)
Frequency of social media discussion	0.072 (0.117)	0.084 (0.109)	-0.582* (0.271)
Number of Obs.	2615	2605	2555
Log pseudo-likelihood	-1416.006	-1420.824	-522.086
Wald Chi <sup>2</sup>	293.260	158.170	177.110

*Notes:* Table presents random-effects logistic regression results of respondents' comment choice over time. Dependent variables are respondents' comment choice of *recommended comments*, *netizens' comments*, and *skip comments* at time  $t$  ( $t = 1, 2, 3, 4, 5$ ). Independent variables include policy number  $N_t$  as the time series variable and respondents' comment choice at  $t$  ( $t = 1$ ). Coefficients are reported. Provincial fixed effects and cutoff points are not reported. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**Fig 6. Time Effects on Comment Exposure Transition Probability**  
 Scenario 1: Recommended Comments to Netizens' Comments



Scenario 2: Netizens' Comments to Recommended Comments



## 5.2 Approval of Policies

To examine whether online comments effectively shape people's supportiveness of the policy, we compared our respondents who were exposed to comments with those who were not exposed to any type of comments whatsoever. As indicated in Section 4.2, of all 1047 valid responses, we included 523 in the treatment group and 524 in the control group which had no access to any of the comments. The control group was included in the analysis to confirm our Hypothesis 3. Because the outcome variable here is a binary variable, we applied logistic regression to analyze the effects of different comment exposures on respondents' approval of policies between the treatment and control groups. The descriptive statistics are presented in Table 4, and the main logistic regression specification was as follows:

$$Pr(Z_{it}) = \text{logit}^{-1}(\sigma_i + \rho D_i + W_i' \varphi + \lambda_i) \quad (2)$$

where  $Z_i$  denotes individual  $i$ 's approval for a certain policy that takes a value of 1 if  $i$  agrees with the policy and 0 otherwise,  $\rho$  is the coefficient on the treatment status  $D_i$ , which takes a value of 1 if respondent  $i$  is in the treatment group and 0 otherwise,  $\varphi$  is a vector of coefficients on individual-level control variables  $W_i$ ,  $\sigma_i$  is individual  $i$ 's intercept and  $\lambda_i$  is the error term clustered at the individual level which is assumed to be independent and identically distributed.

Table 5 reports the logistic regression model of respondents' policy approval in the treatment and control groups. To visually understand these results further, we created Figure 7, which displays the regression results using error bars: Compared with the control group, the treatment group agreed significantly more with the first policy. However, the support for the second and third policies was significantly lower in the treatment group than in the control group. This result corroborates our results for comment choice over time: according

to the respondents' initial comment choice distribution (Table 6), of all 523 respondents in the treatment group, 332 (63.48%) selected *recommended comments* and 111 (21.22%) chose *netizens' comments* as their initial comment choice, whereas 80 (15.30%) skipped the comments altogether. Nevertheless, most respondents in the treatment group were likely influenced by the pro-regime comments under the first policy and therefore they became more supportive of the first policy. However, with regard to the second and third policies, the respondents began shifting their comment exposure to the more critical *netizens' comments*, which led them to become less supportive of the second and third policies.

This finding implies that without the influence of online opinions, netizens do not generally question or challenge social policies made by the state, as we predicted in Section 3.3. Nevertheless, once individuals are provided with a chance to view different discourses, they not only have the tendency to expose themselves to critical information but also are influenced by comments and become more critical in terms of deciding whether they truly agree with certain policies. Therefore, our Hypothesis 3 was accepted.

**TABLE 4: Descriptive Statistics of Respondents in the Control Group and the Treatment Group**

	Control group					Treatment group					Standardized Mean Difference
	N	Mean	Std	Min	Max	N	Mean	Std	Min	Max	
Male	524	0.470	0.500	0	1	523	0.522	0.500	0	1	-0.105
Age	524	36.400	8.875	18	58	523	36.630	8.969	18	56	-0.026
CCP member	524	0.136	0.343	0	1	523	0.122	0.328	0	1	0.039
Education	524	5.050	1.088	1	8	523	5.031	1.098	2	8	0.017
Income	524	3.166	1.322	1	8	523	3.235	1.392	1	8	-0.051
Political interest	524	4.000	0.755	1	5	523	3.945	0.750	1	5	0.074
Frequency of Social Media News Consumption	524	3.424	0.606	1	4	523	3.394	0.592	1	4	0.050
Frequency of Social Media Use	524	4.366	0.885	1	5	523	4.312	0.862	1	5	0.063
Last Time Social Media Use	524	6.513	1.423	1	8	523	6.480	1.452	1	8	0.023
Frequency of Social Media Discussion	524	2.931	0.767	1	4	523	2.920	0.676	1	4	0.016

*Notes:* *Male* is equal to 1 if the respondent is male or to 0 if the respondent is female. *CCP member* is equal to 1 if the respondent is a member of Chinese Communist Party or to 0 otherwise. Description of other variables are the same as described in the *Notes* of Table 1.

**TABLE 5: Logistic Regression for Respondents' Approval of Each Policy**

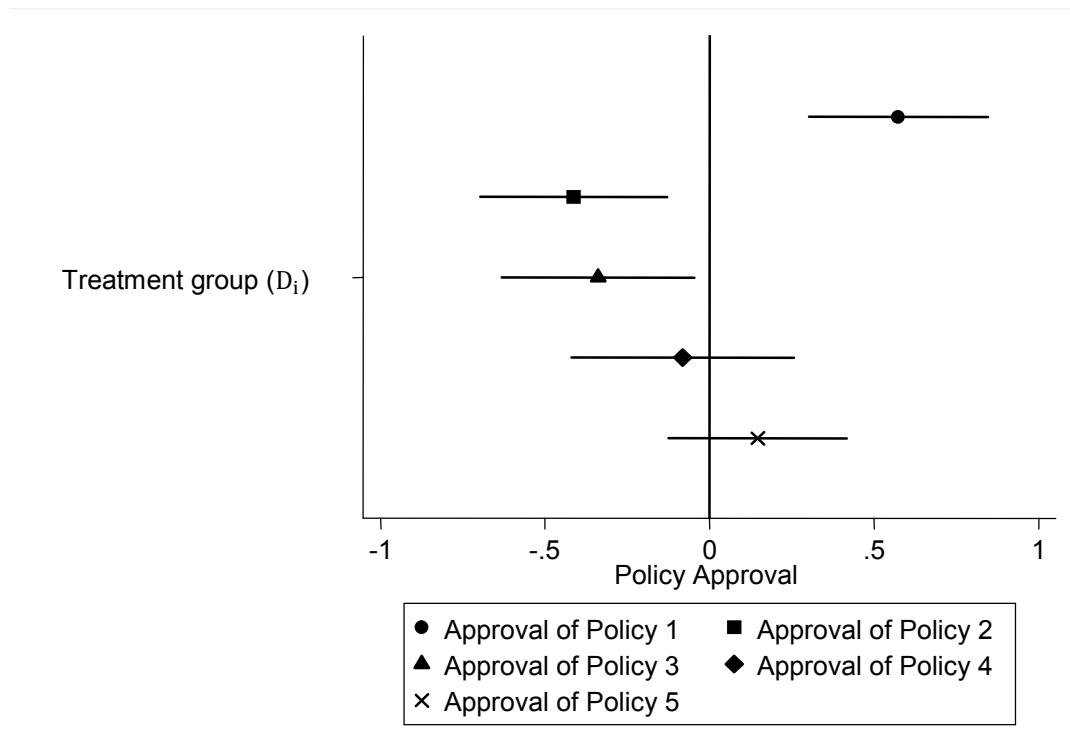
	Logistic regression				
	(1)	(2)	(3)	(4)	(5)
$D_i$	0.574** (0.139)	-0.413** (0.145)	-0.339* (0.150)	-0.081 (0.173)	0.146 (0.138)
Male	0.177 (0.139)	-0.036 (0.146)	0.183 (0.152)	-0.034 (0.178)	0.101 (0.141)
Age	-0.004 (0.009)	0.005 (0.010)	-0.010 (0.010)	-0.017 (0.012)	0.013 (0.009)
CCP member	0.489* (0.236)	-0.100 (0.224)	-0.327 (0.229)	0.221 (0.276)	0.186 (0.227)
Education	-0.053 (0.076)	-0.013 (0.078)	-0.050 (0.080)	-0.046 (0.089)	-0.076 (0.073)
Income	-0.019 (0.062)	0.104 (0.062)	0.161* (0.068)	-0.073 (0.076)	0.077 (0.064)
Political interest	0.251* (0.108)	0.321** (0.115)	0.306** (0.115)	0.258 (0.133)	0.199 (0.109)
Frequency of social media news consumption	0.301 (0.161)	0.014 (0.167)	-0.019 (0.171)	0.323 (0.206)	0.106 (0.160)
Frequency of social media use	-0.092 (0.139)	0.139 (0.141)	0.080 (0.139)	0.070 (0.167)	-0.087 (0.132)
Most recent social media use	0.070 (0.079)	-0.053 (0.083)	0.126 (0.087)	0.080 (0.093)	0.183* (0.075)
Frequency of social media discussion	0.282* (0.117)	0.430** (0.126)	0.254 (0.131)	-0.057 (0.155)	0.042 (0.121)
Number of Obs.	1043	1043	1043	1043	1043
Wald Chi <sup>2</sup>	91.68	81.23	102.57	75.18	79.05
Pseudo R <sup>2</sup>	0.0790	0.0715	0.0919	0.0791	0.0634
Log pseudo-likelihood	-630.019	-586.067	-562.776	-447.525	-623.923

Notes: Specifications 1, 2, 3, 4, and 5 denote respondents' policy approval of the first, second, third, fourth, and fifth policies, respectively. Independent variables include the treatment status  $D_i$  and a series of covariates. Coefficients are reported. Provincial fixed effects and cutoff points are not reported. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**TABLE 6: Treatment Group Respondents' Initial Comment Choice Distribution**

	Number of Respondents	Percent
Initial Choice As <i>Recommended Comments</i> ( $A_i$ )	332	63.48%
Initial Choice As <i>Netizens' Comments</i> ( $B_i$ )	111	21.22%
Initial Choice As <i>Skip Comments</i>	80	15.30%
<b>Total</b>	523	100%

**Fig 7. Differences in Approval of Each Policy Between the Treatment and Control Groups**



*Notes:* Each line displays the error bar of the coefficient on  $D_i$  from a unique regression where the dependent variable is respondents' policy approval.

## 6. Conclusion

Some scholars have contended that nondemocratic regimes are able to use social media to run soft propaganda to change citizens' political preferences (MacKinnon, 2011; Stockmann & Gallagher, 2011; Morozov, 2012; Göbel, 2013). One way to achieve this is to intervene in the online discussion by producing and amplifying comments conveying pro-regime values. These manipulated comments are intended to influence public opinion in favor of the party-state by aiding in reinforcing citizens' belief in authoritarianism, thereby strengthening regime legitimacy. Although a regime may be motivated to spread pro-regime online comments, how netizens view such comments remains unclear. This study provides a systematic investigation of this issue. We designed an online survey resembling the Comments section of the social media platform *Weibo*, whereby the respondents could select to view either the pro-regime "recommended comments" or the critical "netizens' comments."

We find that although most of our respondents chose to first view pro-regime comments, they immediately shifted to viewing critical comments thereafter. This result suggests that the Comments section on social media platforms performs a crucial information role: it helps social media users gain an unorthodox perspective of social events. In the context of China, the Comments section provides netizens with a source of alternative information under a highly regulated media environment.

We also ran an embedded experiment to examine whether the existence of a "breathing



space” changed our respondents’ attitudes toward policies. The results indicate that our respondents with access to online comments were more critical of state policies than those who did not. This finding explains the reason that online censorship is pervasive in China; even a small “breathing space” may undermine the public’s policy support, which could be a key indicator of regime support among citizens.

Our findings contribute to the literature on citizens’ resilience to information control and manipulation in authoritarian regimes (Roberts, 2020). We argue that citizens in authoritarian regimes are not only resilient to censorship (Wong & Liang, 2021), but they are also able to distinguish between state-promoted and state-manipulated propaganda.

The current findings also provide an alternative argument to the current literature. Although some studies have suggested that pro-regime astroturfing in authoritarian regimes may serve as a means to distract the public’s attention from social negative happenings and protests (King, Pan, & Roberts, 2017; Roberts, 2018; Stukal, Sanovich, Bonneau, & Tucker, 2022), we argue that the pro-regime bots may not be as effective in terms of distracting netizens’ attention from negative events and counterbalancing regime critics. In other words, netizens in authoritarian regimes are still able to bypass the pro-regime propaganda and seek alternative information, and those officially fabricated and promoted pro-regime materials may not be able to fully neutralize the effects of online criticisms.

This study, however, has some limitations. In particular, our experimental settings could

not genuinely reflect the daily information consumption habits of all Chinese netizens: In an experimental setting, netizens may choose to view pro-regime content first and then switch their exposure to more critical content because of curiosity. However, in a real-world setting, when exposure to a new policy on a new day, netizens may still choose to view pro-regime content first. They may repeatedly expose themselves to pro-regime content first on a daily basis. Therefore, a one-time experiment cannot capture people's longitudinal information consumption habit.

One approach to resolving the aforementioned limitation is to examine people's commitment to online comments. In other words, even in an experimental setting, researchers can attempt to track respondents' actual time spent on viewing the comments and note the types of comments drawing the most attention of the respondents. This approach was applied in the second study of this thesis; its results and discussion are presented in Chapter 3.

## References

- Arceneaux, K., Johnson, M., & Murphy, C. (2012). Polarized political communication, oppositional media hostility, and selective exposure. *The Journal of Politics*, 74(1), 174-186.
- Bamman, D., O'Connor, B., & Smith, N. (2012). Censorship and deletion practices in Chinese social media. *First Monday*, 17(3).
- Boas, T. C. (2006). Weaving the authoritarian web: The control of internet use in nondemocratic regimes. In J. Zysman & A. Newman (Eds.). *How revolutionary was the digital revolution? National responses, market transitions, and global technology* (pp. 361-378). Stanford, CA: Stanford.
- Bremmer, I. (2010). Democracy in cyberspace: What information technology can and cannot do. *Foreign Affairs*, 89(6), 86-92.
- Breuer, A., Landman, T., & Farquhar, D. (2015). Social media and protest mobilization: Evidence from the Tunisian revolution. *Democratization*, 22(4), 764-792.
- Chan, C. H., & Fu, K. W. (2017). The relationship between cyberbalkanization and opinion polarization: Time-series analysis on Facebook pages and opinion polls during the Hong Kong Occupy Movement and the associated debate on political reform. *Journal of Computer-Mediated Communication*, 22(5), 266-283.
- Chase, M. S., & Mulvenon, J. C. (2002). *You've got dissent! Chinese dissident use of the internet and Beijing's counter-strategies*. Santa Monica, CA: Rand Corporation.
- Chen, D. (2017). Local distrust and regime support: Sources and effects of political trust in

- China. *Political Research Quarterly*, 70(2), 314-326.
- Chen, J., & Xu, Y. (2017). Information manipulation and reform in authoritarian regimes. *Political Science Research and Methods*, 5(1), 163-178.
- Chen, J., Zhong, Y., & Hillard, J. W. (1997). The level and sources of popular support for China's current political regime. *Communist and Post-Communist Studies*, 30(1), 45-64.
- Chen, J., Zhong, Y., Hillard, J., & Scheb, J. (1997). Assessing political support in China: Citizens' evaluations of governmental effectiveness and legitimacy. *Journal of Contemporary China*, 6(16), 551-566.
- Chen, Y., & Yang, D. Y. (2019). The impact of media censorship: 1984 or brave new world?. *American Economic Review*, 109(6), 2294-2332.
- Colleoni, E., Rozza, A., & Arvidsson, A. (2014). Echo chamber or public sphere? Predicting political orientation and measuring political homophily in Twitter using big data. *Journal of Communication*, 64(2), 317-332.
- Costigan, J. M., & Xin, X. (2020, April 29). China's Digital Cultural Revolution: Hyper-nationalist online attacks, like the campaign against Fang Fang, have disturbing parallels to the Mao era. *The Diplomat*. Retrieve from: <https://thediplomat.com/2020/04/chinas-digital-cultural-revolution/>
- Creemers, R. (2017). Cyber China: Upgrading propaganda, public opinion work and social management for the twenty-first century. *Journal of Contemporary China*, 26(103), 85-100.
- Crowther, M. J., & Lambert, P. C. (2017). Parametric multistate survival models: Flexible modelling allowing transition-specific distributions with application to estimating

- clinically useful measures of effect differences. *Statistics in Medicine*, 36(29), 4719-4742.
- Deibert, R., & Rohozinski, R. (2010). Liberation vs. control: The future of cyberspace. *Journal of Democracy*, 21(4), 43-57.
- Dettmer, J. (2020, May 06). China's 'wolf warrior' diplomacy prompts international backlash. *Voice of America*. Retrieve from: <https://www.voanews.com/covid-19-pandemic/chinas-wolf-warrior-diplomacy-prompts-international-backlash>
- Diamond, L. (2010). Liberation technology. *Journal of democracy*, 21(3), 69-83.
- Druckman, J. N. (2004). Political preference formation: Competition, deliberation, and the (ir)relevance of framing effects. *American Political Science Review*, 98(4), 671-686.
- Dubois, E., & Blank, G. (2018). The echo chamber is overstated: The moderating effect of political interest and diverse media. *Information, Communication & Society*, 21(5), 729-745.
- Egorov, G., Guriev, S., & Sonin, K. (2009). Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American Political Science Review*, 103(4), 645-668.
- Esarey, A., Stockmann, D., & Zhang, J. (2017). Support for propaganda: Chinese perceptions of public service advertising. *Journal of contemporary China*, 26(103), 101-117.
- Fang, K., & Repnikova, M. (2018). Demystifying "Little Pink": The creation and evolution of a gendered label for nationalistic activists in China. *New Media & Society*, 20(6), 2162-2185.

- Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research*, 20(2), 303-315.
- Fu, K. W., Chan, C. H., & Chau, M. (2013). Assessing censorship on microblogs in China: Discriminatory keyword analysis and the real-name registration policy. *IEEE Internet Computing*, 17(3), 42-50.
- Gabriel, K. R., & Neumann, J. (1962). A Markov chain model for daily rainfall occurrence at Tel Aviv. *Quarterly Journal of the Royal Meteorological Society*, 88(375), 90-95.
- Garrett, R. K. (2009). Echo chambers online?: Politically motivated selective exposure among Internet news users. *Journal of Computer-Mediated Communication*, 14(2), 265-285.
- Geddes, B., & Zaller, J. (1989). Sources of popular support for authoritarian regimes. *American Journal of Political Science*, 319-347.
- Göbel, C. (2013). The information dilemma: How ICT strengthen or weaken authoritarian rule. *Statsvetenskaplig tidskrift*, 115(2013), 367-384.
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making*, 26(3), 213-224.
- Greitens, S. C. (2013). Authoritarianism online: What can we learn from internet data in nondemocracies?. *PS: Political Science & Politics*, 46(2), 262-270.
- Gunitsky, S. (2015). Corrupting the cyber-commons: Social media as a tool of autocratic stability. *Perspectives on Politics*, 13(1), 42-54.
- Han, R. (2015a). Defending the authoritarian regime online: China's "voluntary fifty-cent

- army". *The China Quarterly*, 224, 1006-1025.
- Han, R. (2015b). Manufacturing consent in cyberspace: China's "Fifty-Cent Army". *Journal of Current Chinese Affairs*, 44(2), 105-134.
- Hobbs, W. R., & Roberts, M. E. (2018). How sudden censorship can increase access to information. *American Political Science Review*, 112(3), 621-636.
- Huang, H. (2015). Propaganda as signaling. *Comparative Politics*, 47(4), 419-444.
- Huang, H. (2018). The pathology of hard propaganda. *The Journal of Politics*, 80(3), 1034-1038.
- Hung, C. F. (2010). China's propaganda in the information age: Internet commentators and the Weng'an incident. *Issues & Studies*, 46(4), 149-180.
- 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.
- 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.
- Iyengar, S., & Simon, A. (1993). News coverage of the Gulf crisis and public opinion: A study of agenda-setting, priming, and framing. *Communication Research*, 20(3), 365-383.
- Jiang, Y. (2012). *Cyber-nationalism in China: Challenging Western media portrayals of internet censorship in China*. Adelaide, Australia: University of Adelaide Press.
- King, G., Pan, J., & Roberts, M. E. (2013). How censorship in China allows government

- criticism but silences collective expression. *American Political Science Review*, 107(2), 326-343
- King, G., Pan, J., & Roberts, M. E. (2017). How the Chinese government fabricates social media posts for strategic distraction, not engaged argument. *American Political Science Review*, 111(3), 484-501.
- Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & Quantity*, 47(4), 2025-2047.
- Kuran, T. 1997. *Private truths, public lies: The social consequences of preference falsification*. Cambridge, MA: Harvard University Press.
- Lei, X., & Lu, J. (2017). Revisiting political wariness in China's public opinion surveys: Experimental evidence on responses to politically sensitive questions. *Journal of Contemporary China*, 26(104), 213-232.
- Lei, Y. W. (2011). The political consequences of the rise of the Internet: Political beliefs and practices of Chinese netizens. *Political Communication*, 28(3), 291-322.
- Li, L. (2004). Political trust in rural China. *Modern China*, 30(2), 228-258.
- Li, L. (2016). Reassessing trust in the central government: Evidence from five national surveys. *The China Quarterly*, 225, 100-121.
- Lu, J. (2013). Acquiring political information in contemporary China: Various media channels and their respective correlates. *Journal of Contemporary China*, 22(83), 828-849.
- Lu, J. (2014). A cognitive anatomy of political trust and respective bases: Evidence from a two-city survey in China. *Political Psychology*, 35(4), 477-494.



- Lu, J., Aldrich, J., & Shi, T. (2014). Revisiting media effects in authoritarian societies. *Politics and Society*, 42, 253-283.
- Lu, J., & Shi, T. (2015). The battle of ideas and discourses before democratic transition: Different democratic conceptions in authoritarian China. *International Political Science Review*, 36(1), 20-41.
- Lü, X. (2014). Social policy and regime legitimacy: The effects of education reform in China. *American Political Science Review*, 108(2), 423-437.
- Lynch, M. (2011). After Egypt: The limits and promise of online challenges to the authoritarian Arab state. *Perspectives on Politics*, 9(2), 301-310.
- MacKinnon, R. (2011). Liberation technology: China's "Networked Authoritarianism". *Journal of Democracy*, 22(2), 32-46.
- Miller, B. (2016). Automated detection of Chinese government astroturfers using network and social metadata. *Available at SSRN 2738325*.
- Morozov, E. (2012). *The net delusion: The dark side of Internet freedom*. New York: Public Affairs.
- Nip, J. Y., & Fu, K. W. (2016). Challenging official propaganda? Public opinion leaders on Sina Weibo. *The China Quarterly*, 225, 122-144.
- O'Hara, K., & Stevens, D. (2015). Echo chambers and online radicalism: Assessing the internet's complicity in violent extremism. *Policy & Internet*, 7(4), 401-422.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45(4), 867-872.

- Pan, J., & Xu, Y. (2018). China's ideological spectrum. *The Journal of Politics*, 80(1), 254-273.
- Qin, B., Strömberg, D., & Wu, Y. (2017). Why does China allow freer social media? Protests versus surveillance and propaganda. *Journal of Economic Perspectives*, 31(1), 117-40.
- Qiu, J. L. (2006). The changing web of Chinese nationalism. *Global Media and Communication*, 2(1), 125-128.
- Repnikova, M., & Fang, K. (2018). Authoritarian participatory persuasion 2.0: Netizens as thought work collaborators in China. *Journal of Contemporary China*, 27(113), 763-779.
- Roberts, M. E. (2018). *Censored: Distraction and diversion inside China's Great Firewall*. Princeton, NJ, USA: Princeton University Press.
- Roberts, M. E. (2020). Resilience to online censorship. *Annual Review of Political Science*, 23, 401-419.
- Shi, T. (2001). Cultural values and political trust: A comparison of the People's Republic of China and Taiwan. *Comparative Politics*, 33(4), 401-419.
- Shirky, C. (2011). The political power of social media: Technology, the public sphere, and political change. *Foreign Affairs*, 90(1), 28-41.
- Stockmann, D., & Gallagher, M. E. (2011). Remote control: How the media sustain authoritarian rule in China. *Comparative Political Studies*, 44(4), 436-467.
- Stockmann, D., & Luo, T. (2017). Which social media facilitate online public opinion in China?. *Problems of Post-Communism*, 64(3-4), 189-202.
- Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication*, 60(3), 556-576.

- Stukal, D., Sanovich, S., Bonneau, R., & Tucker, J. A. (2022). Why Botter: How Pro-Government Bots Fight Opposition in Russia. *American Political Science Review*, 1-15.
- Tang, M., & Huhe, N. (2014). Alternative framing: The effect of the internet on political support in authoritarian China. *International Political Science Review*, 35(5), 559-576.
- Teixeira, L. (2020, April 17). Thais show how to beat China's online army: A pop culture battle turned into a nationalist frenzy and a propaganda problem. *Foreign Policy*.  
Retrieve from:  
<https://foreignpolicy.com/2020/04/17/nnevvy-bright-firewall-thailand-china-online-army/>
- Tong, Y., & Lei, S. (2013). War of position and microblogging in China. *Journal of Contemporary China*, 22(80), 292-311.
- Tsang, S. (2009). Consultative Leninism: China's new political framework. *Journal of Contemporary China*, 18(62), 865-880.
- Vuori, J. A., & Paltemaa, L. (2015). The lexicon of fear: Chinese internet control practice in Sina Weibo microblog censorship. *Surveillance & Society*, 13(3/4), 400-421.
- Wang, W. Y. (2013). Weibo, framing, and media practices in China. *Journal of Chinese Political Science*, 18(4), 375-388.
- Wang, Z. (2005). Before the emergence of critical citizens: Economic development and political trust in China. *International Review of Sociology*, 15(1), 155-171.
- Whittaker, J. A., & Thomason, M. G. (1994). A Markov chain model for statistical software testing. *IEEE Transactions on Software Engineering*, 20(10), 812-824.
- Wong, S. H. W., & Liang, J. (2021). Dubious until officially censored: Effects of online

- censorship exposure on viewers' attitudes in authoritarian regimes. *Journal of Information Technology & Politics*, 18(3), 310-323.
- Wong, S. H. W., & Wong, M. Y. (2020). "Distant participation" and youth political attitudes: Evidence from a natural experiment. *Social Science Quarterly*, 101(4), 1489-1512.
- Wu, A. X. (2013). Ideological polarization over a China-as-superpower mindset: An exploratory charting of belief systems among Chinese Internet users, 2008-2011. *International Journal of Communication*, 8, 2243-2272.
- Yang, G. (2009). *The power of the internet in China: Citizen activism online*. Columbia, USA: Columbia University Press.
- Yang, G. (2014). The return of ideology and the future of Chinese Internet policy. *Critical Studies in Media Communication*, 31(2), 109-113.
- Yang, P. & Tang, L. (2018). "Positive Energy": Hegemonic intervention and online media discourse in China's Xi Jinping era. *China: An International Journal*, 16(1), 1-22.
- Yang, Q., & Tang, W. (2010). Exploring the sources of institutional trust in China: Culture, mobilization, or performance?. *Asian Politics & Policy*, 2(3), 415-436.
- Zhao, S. (1998). A state-led nationalism: The patriotic education campaign in post-Tiananmen China. *Communist and Post-communist studies*, 31(3), 287-302.
- Zhao, S. (2016). The ideological campaign in Xi's China: Rebuilding regime legitimacy. *Asian Survey*, 56(6), 1168-1193.
- Zhou, Y. (2005). Informed nationalism: Military websites in Chinese cyberspace. *Journal of Contemporary China*, 14(44), 543-562.
- Zhu, J., Lu, J., & Shi, T. (2013). When grapevine news meets mass media: Different

information sources and popular perceptions of government corruption in mainland China. *Comparative Political Studies*, 46(8), 920-946.

## **Chapter 3: Why View Comments? Motivations Underlying Chinese Netizens' Social**

### **Media Comment Exposure**

#### **Abstract**

Authoritarian regimes such as China control the Internet strictly. However, they allow for a certain degree of online political deliberations because the authorities need to learn public opinion. In general, netizens can discuss state-proposed policies with others on social media by making comments that support or challenge these policies. These comments can also be expressed in an emotional manner (more provoking) or an analytical manner (more informative). In this study, we empirically examine the types of comments that appeal to Chinese social media users the most. We ask three questions: (1) Which comments are more attractive to Chinese netizens—those that agree with the proposed policies or those that disagree with them? (2) How should comments be expressed to appeal to the netizens—in an emotional or analytical manner? (3) What types of comments are most effective in shaping individuals' policy support? In our online survey experiment, we find that the netizens are more likely to view emotional comments that disagree with the proposed policies. In addition, exposure to policy-challenging comments reduces individuals' policy support regardless of whether the comments are expressed in an emotional or analytical manner. Finally, the standpoint conveyed by the comment, but not the form of its expression, matters the most in terms of directing individuals' policy support.

*Keywords:* Social media comments, emotional comments, analytical comments, policy

support

## **1. Introduction**

In authoritarian regimes, social media is considered as a critical tool with the potential to effect political changes in the relevant nations (Diamond, 2010; Shirky, 2011; Howard & Parks, 2012; Reuter & Szakonyi, 2015). The main argument is that in an authoritarian regime, where channels for political deliberations are limited, individuals can access user-generated information that is different from officially disseminated propaganda on social media. Netizens can then discuss social and political issues with others by writing posts and comments on the new cyber public spheres, raising concerns to the state policies and government performance (Yang, 2009; Fuchs, 2014; Shao & Wang, 2017; Yang & Calhoun, 2007; Rauchfleisch & Schäfer, 2015). Occasionally, these counter-official discourses may vary from criticizing the regime to motivating collective actions; however, criticism related to the regime can damage the authorities' image, whereas the motivation of collective action can pose a serious threat to regime legitimacy and stability (King, Pan, & Roberts, 2013; Tai & Fu, 2020).

Other scholars, however, have argued that the authorities in authoritarian regimes are able to use various propagandistic means to co-opt social media to serve their own interests and better rule the masses (Gunitsky, 2015; Creemers, 2017). Through patriotic education and ideological propaganda, a regime may cultivate fervent supporters (Fang & Repnikova, 2018; Yang, 2019; Wu, Li, & Wang, 2019; Wang & Kobayashi, 2021), whose voices can then be

incorporated and amplified by the regime so as to spread party-state values (Repnikov & Fang, 2018; Plantin & De Seta, 2019). The regime may also fabricate social media posts and comments to overwhelm the cyberspace with pro-regime values and distract netizens' attention from negative social events reported online and related discussions (Miller, 2016; King, Pan, & Roberts, 2017).

Some of these online voices—regardless of whether they support or oppose the regime (Lu, Pan, & Xu, 2021)—are expressed in an emotional manner (Tong, 2015). For instance, patriots post encouraging messages, praising for the success of the government and support the state's policies, whereas dissenters express their anger to criticize the government's incompetence and question the unreasonable aspects of the state's policies (Han, 2015; Cairns & Carlson, 2016; Song & Wu, 2018; Wu, 2018). Despite many emotionally expressed opinions, some informative and rational comments posted by users who genuinely want to discuss or exchange ideas with other netizens or want to persuade others to change their political attitudes with reason (Liu, Xu, & Li, 2019; Medaglia & Zhu, 2017; Weeks, Ardèvol-Abreu, & Gil de Zúñiga, 2017) can still be found.

Because online information can play a vital role in drawing the authority's close attention and even inducing the government's regulations (Luqiu, 2017), identifying the type of information that can best motivate individuals to pay more attention warrants investigation. In this article, we primarily focus on one type of social media information—social media comments—and examine for the cues that predict the respondents' willingness on comment



exposure. We examine social media comments because social media comments are one of the most important components of online information and most online discussions occur in the Comments section of social media posts.

We have three research questions. First, we attempt to find the type of comment that receives most netizens' attention—comments that agree or disagree with the policy issues reported in the social media posts. Second, we examine for any effects of different expression forms—emotional and analytical—on respondents' attention to the comments. Finally, we study if individuals' attitudes toward policies can be changed through exposure to different forms of comments.

We used an online survey with a  $2 \times 2$  factorial design (agreeing/disagreeing  $\times$  emotional/analytical) to examine the effects of four types of comments on netizens' comment exposure willingness. The comments belonged to a social media post regarding a proposed policy. We randomly assigned respondents into one of four groups, with each group containing up to 30 comments. Then, we measured the time (in seconds) they spent on these comments and analyzed their attitudinal changes after exposure to the different forms of comments. To increase the robustness of our results, we showed our respondents three social policies and the corresponding comments and repeated the experiments three times. We noted that although there was no significant difference between the comments that agree and disagree with the policies in terms of attracting respondents' attention, the respondents' tended to spend significantly more time on viewing comments that disagree with the policies

in an emotional manner. We further find that despite the difference in comment attractiveness, exposure to comments that disagree with the policies significantly reduced the respondents' policy support. However, the effects remain relatively identical regardless of whether the comments are expressed emotionally or analytically.

Our study provides some implications for political communication literature. First, we argue that Chinese netizens tend to spend more time on regime-challenging information, implying that they still consider social media as a place to consume alternative information that deviates from pro-regime and pro-official discourses. Nevertheless, the information consumed by netizens tends to be emotional rather than analytical, lacking reason and decorum. This may explain the reason that social media has the potential of polarizing public opinion as emotional content does not allow individuals to exchange and discuss ideas with politeness and reasons but can only further provoke people to fight with others who hold different opinions, resulting in more online flaming wars but not political deliberations. Second, after individuals are exposed to comments that disagree with the state's policies, their attitudes toward the policies becomes less supportive, and this exposure effect is not affected by how these comments are presented. It is the standpoint expressed in the comments that plays the main role in changing people's political attitudes.

## **2. Literature Review**

Social media fosters online discussions through its comments function where individuals can communicate their own ideas with others. These comments can be ideologically conforming

or conflicting. In China, online political debates often lie between two campaigns due to its one-party system—one that generally agrees with and supports the party-state and one that often disagrees with and criticizes it (Lei, 2011; Yang, 2009; Lu & Shi, 2015; Hyun & Kim, 2015; Zhang, Liu, & Wen, 2018; Pan & Xu, 2018; Lu, Pan, & Xu, 2021; Wang & Tao, 2021). Some studies have suggested that individuals tend to view content that is consistent with their preexisting beliefs and avoid messages that disagree with their perspectives (Colleoni, Rozza & Arvidsson, 2014; Barberá, Jost, Nagler, Tucker, & Bonneau, 2015), whereas some have argued that people still have the need to consume alternative information to learn from others who hold different thoughts (Garrett, 2009b; Jahng, 2018; Guess, 2018) and that people still inevitably encounter opinion-challenging information provided they spend a sufficient amount of time consuming information online (Arceneaux, Johnson, & Murphy, 2012; Bail et al., 2018; Kim & Kim, 2019). Although scholars have extensively discussed the echo chamber effects and selective exposure effects and the consequence of online opinion polarization (Garrett, 2009a; Dvir-Gvirsman, Tsfati, & Menchen-Trevino, 2016; Gvirsman, 2014; Rodriguez, Moskowitz, Salem, & Ditto, 2017; Dylko et al., 2017; Spohr, 2017; Cardenal, Aguilar-Paredes, Galais, & Pérez-Montoro, 2019; Asker & Dinas, 2019; Banks, Calvo, Karol, & Telhami, 2020), sometimes, online contradictory views can lead to benign political deliberation through which individuals exchange their insightful opinions with others, whereas at other occasions, these online discussions may be expressed in an emotional manner—resulting in flame wars with irrational, extreme, and uncivil voices that could easily polarize the public (Yardi & Boyd, 2010; Jiang, 2016; Song & Wu, 2018; Jiang & Esarey, 2018; Stockmann, Luo, & Shen, 2020).

Recent literature has thus focused on the effects of different types of comments on individuals' social media engagement and political attitudes (Houston, Hansen, & Nisbett, 2011; Lee, 2012; Hsueh, Yogeewaran, & Malinen, 2015). In particular, the focus has been on how online emotional discourses such as civil (or polite) and uncivil (or abusive) comments can respectively increase and decrease individuals' political discussion and participation and affect their political attitudes and attitudinal polarization on social media (Hwang, Kim, & Huh, 2014; Chen & Lu, 2017; Gan, Lee, & Li, 2017; Kim & Hwang, 2019; Lee, Liang, & Tang, 2019; Kosmidis & Theocharis, 2020; Yarchi, Baden, & Kligler-Vilenchik, 2020), their trust in social media information quality and credibility (Borah, 2014; Graf, Erba, & Harn, 2017; Prochazka, Weber, & Schweiger, 2018; Heinbach, Ziegele, & Quiring, 2018; Pjesivac, Geidner, & Cameron, 2018; Searles, Spencer, & Duru, 2020; Gearhart, Moe, & Zhang, 2020), and their support for different policy issues (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2014; Jennings & Russell, 2019).

In the field of political communication, however, research comparing the effects of online rational and emotional expression on netizens' attention to information and willingness on information exposure is lacking. Because ideologically one-sided, prejudiced comments may lead to more polarized public attitudes (Anderson, Brossard, Scheufele, & Xenos, 2012; Tang & Huhe, 2014; Hsueh, Yogeewaran, & Malinen, 2015; Witteman, Fagerlin, Exe, Trottier, & Zikmund-Fisher, 2016; Kim & Kim, 2019), how rational and emotional discourses, along with opinion-conforming and opinion-challenging discourses, may collaboratively

influence individuals warrants examination.

In this study, we ask two questions: (1) What type of comments can motivate individuals' comment exposure willingness? (2) How exposure to different types of comments affects individuals' political attitudes? Recent studies on cues that may promote individuals' online discussion engagement have focused on how commenters' personal traits and their interrelationship with viewers predict viewers' exposure to comments and their endorsement of these comments (Kim, Hsu, & de Zúñiga, 2013; Lee & Pingree, 2016; Lee, Hansen, & Lee, 2016; Munger, 2017; Ellison, Triêu, Schoenebeck, Brewer, & Israni, 2020), how comment content determines individuals' willingness on comment exposure warrants further discussion. Thus, we adopted a 2 (agreeing and disagreeing)  $\times$  2 (emotional and analytical) factorial experiment design in this study to examine the effects of two dimensions (i.e., four types) of comments on individuals' comment exposure willingness and their attitudes toward political issues.

### **3. Hypotheses**

#### *3.1 Comment Exposure*

Lee and Jang (2010) indicate that people have the need for cognition. Because social media has become a virtual place for knowledge sharing (Majchrzak, Faraj, Kane, & Azad, 2013; Beam, Hutchens, & Hmielowski, 2016), people tend to use social media to make themselves more informed. A manner in which individuals can acquire additional information from social media is by exposing themselves to relevant comments (Kalogeropoulos, Negrodo, Picone, &

Nielsen, 2017; Ho, Yang, Thanwarani, & Chan, 2017; Jahng, 2018). By reading other people's comments, people can evaluate source credibility and estimate public opinion on issues covered in the content (Kim, 2015; Luqiu, Schmierbach, & Ng, 2019; Lee, Atkinson & Sung, 2020; Jahng, Stoycheff, & Rochadiat, 2021). Individuals also rely on others' comments to make judgments about political agendas and political candidates (Kim & Vishak, 2008; Lee & Pingree, 2016; Gottfried, Hardy, Holbert, Winneg, & Jamieson, 2017). These comments can be considered analytical because they provide sufficient information to viewers that trigger analytical thinking in them (Blom, Carpenter, Bowe, & Lange, 2014).

Some studies have indicated that people do use social media not to acquire knowledge but to satisfy their emotional needs—which includes self-expression of personal emotions (Nardi, Schiano, Gumbrecht, & Swartz, 2004; Leung, 2009). Accordingly, social media comments can often contain emotional rather than informative expressions. Studies have also suggested that emotional messages tend to become viral and spread faster than other types of messages on social media sites, indicating that individuals' information consumption habits on social media are inclined toward emotional content rather than informative content (Stieglitz & Dang-Xuan, 2013; Brady, Wills, Jost, Tucker, & Van Bavel, 2017; Wang & Qian, 2021).

Recent studies on Chinese social media have suggested that both emotional and informative content can be found on *Weibo*—one of the most popular social media platforms in China (Wang, 2013; Fan, Zhao, Chen, & Xu, 2014; Song, Dai, & Wang, 2016; Stockmann

& Luo, 2017; Liu, Xu, & Li, 2019). Of these, emotional content is predominant on *Weibo* platform and has a larger impact on *Weibo* users—in terms of message sharing and online discussion participation—than informative content does. These findings support the argument that people use social media mainly for consuming emotional content and seeking consensus from like-minded individuals (Chen, Wu, & Li, 2018). As such, two competing hypotheses that can be raised based on these findings: either individuals are more likely to pay attention to emotional comments than analytical comments or individuals are more likely to pay attention to analytical comments than emotional comments.

In China, the Internet and social media are strictly controlled by the government; moreover, most anti-regime discourses and content are not tolerated by the Chinese government. However, this does not mean the opposing opinions are completely censored, mainly because the authorities need to hear the genuine demands of the public and make policies that do not offend the majority so as to maintain their legitimacy (Qin, Strömberg, & Wu, 2017). Social media serves as a field where dissenting views are allowed to exist to some extent (Egorov, Guriev, & Sonin, 2009; Shirky, 2011; Nip & Fu, 2016). Compared with the offline Chinese population, Chinese netizens on social media platforms tend to be more supportive of the norms of democracy and critical of Chinese political conditions. Netizens proactively look for counter-hegemony discourse instead of prosaic propaganda online to better supervise local government officials and advocate for policy improvements (Tong & Lei, 2013). In summary, despite a highly controlled online environment, netizens still consider online space as a source of alternative information, which can make them more

informed (Yang, 2009; Garrett, 2009b; Zhu, Lu, & Shi, 2013; Jahng, 2018; Guess, 2018).

Scholars, however, have also noted an increase in the nationalistic sentiment on China's Internet. Some regime supporters on the Internet hold strong patriotic sentiment, voluntarily supporting the government and state policies and defending the regime against being criticized by opponents or foreigners (Jiang, 2012; Hyun, Kim, & Sun, 2014; Fang & Repnikova, 2018). This phenomenon may be a result of China's long-term propaganda campaign on the Internet. Through information manipulation, authoritarian regimes such as China can sustain their legitimacy and gain a high approval rating in polls (Stockmann & Gallagher, 2011; Guriev & Treisman, 2019, 2020). In addition, China's economic growth in the recent decades has led to increased public support for the regime and aided the regime in gaining performance legitimacy (Yang & Zhao, 2015). Here, it is possible that many Chinese netizens genuinely approve of the regime's performance and tend to consume information that is in line with the party-state values. Thus, two more competing hypotheses can be proposed here: either people in China are more likely to consume online content that deviates from official discourses or they are more likely to view content that conforms with the regime ideology. Therefore, four parallel hypotheses are created:

Hypothesis 1a: *Chinese netizens are more likely to find comments that emotionally agree with the state's policies more appealing.*

Hypothesis 1b: *Chinese netizens are more likely to find comments that analytically agree*



*with the state's policies more appealing.*

Hypothesis 1c: *Chinese netizens are more likely to find comments that emotionally disagree with the state's policies more appealing.*

Hypothesis 1d: *Chinese netizens are more likely to find comments that analytically disagree with state's policies more appealing.*

### *3.2 Attitudinal Change*

Theory of framing effects suggests that exposure to different framings of a political issue may lead to different political opinions regarding the issue (Iyengar & Simon, 1993; Iyengar, 1996; Druckman, 2004). Relevant literature has suggested that although individuals' political attitudes may be strengthened by ideologically concordant framings (Slothuus & De Vreese, 2010), the framing effects can still direct individuals' opinions as desired (Lecheler & De Vreese, 2019). For instance, a positive portrait of a social policy may lead to more public support for the policy, whereas a negative framing may reduce it (Tang & Huhe, 2014). Nevertheless, regardless of their preexisting beliefs, individuals may be affected by different framings.

In persuasion theory literature, some scholars have argued that reasoning and logical expressions can effectively influence individual opinions (Rydell & McConnell, 2006; Crano & Prislin, 2006; Mayer & Tormala, 2010). Studies on social media have found that

argumentative messages can sufficiently persuade people to shift their political attitudes (Gil de Zúñiga, Barnidge, & Diehl, 2018; Öcal, Xiao, & Park, 2021). By contrast, some studies have argued that emotional framing and content play the same role in affecting attitudinal formation and changing individuals' attitudes (Nabi, 2003; Lecheler, Schuck, & De Vreese, 2013; Song, Dai, & Wang, 2016; Hameleers, Bos, & De Vreese, 2017; Wirz, 2018; Clifford, 2019; Marquart, Brosius, & De Vreese, 2019). The subtle difference depends on whether a certain individual holds a preexisting affection- or cognition-based attitude toward a certain issue (Haddock, Maio, Arnold, & Huskinson, 2008; Ryffel, Wirz, Kühne, & Wirth, 2014; Ryffel, 2016). Nevertheless, studies have shown that people do not always reflect on different issues in the same manner. Because of their limited cognition resources, individuals tend to react to issues critically only when they are aware of the issues (Zaller, 1992; Lupia & McCubbins, 1998). Under such circumstances, both emotional and analytical expression significantly impact people's attitudes, and the effects depend on the personal traits, issues, and topics. Accordingly, we hypothesize the following:

Hypothesis 2: *Individuals are more likely to agree or disagree with the policy if they are exposed to comments that agree or disagree with the policy—regardless of whether the comments are expressed emotionally or analytically.*

## **4. Research Design**

### *4.1 Survey Experiment*

We performed an online survey experiment to examine the type of *Weibo* comments Chinese

netizens tend to view more and how it affects their attitudes toward the relevant post. We used three *Weibo* posts, covering three controversial topics, and their comments as experimental components.

Three *Weibo* posts are about (1) a policy of improving and using traditional Chinese medicine (TCM) for treating COVID-19 during the pandemic; (2) a policy of requiring the double-negative COVID-19 test reports from overseas Chinese citizens, restricting overseas Chinese citizens from returning to China; and (3) a policy of raising the university graduation standard, restricting university students from graduating easily. We selected these three topics because they are somewhat controversial, enabling the collection of comments that contained both agreeing and disagreeing opinions with not only rational but also emotional expression.

The general opinion on the three posts we used is polarized among the Chinese population: Regarding the first post, some Chinese netizens believe that TCM is effective against the COVID-19 virus, whereas others believe evidence-based Western medicine is the only effective treatment method. About the second post, some Chinese netizens believe that the policy restricting overseas Chinese citizens from returning is too strict and inhumane, whereas others believe that this policy is acceptable because it protects domestic citizens. Regarding the final post, some Chinese netizens consider the policy to increase the difficulty of graduating for university students is unreasonable because the universities have many teachers who cannot teach well, whereas others consider that the reason these students cannot graduate on time is that they are too lazy and playful (see Appendix 3 for exact phrasing of

the posts).

In the survey, the respondents were first asked to answer several questions related to their demographics and their social media usage habits and then they were asked to indicate their attitudes toward five social issues. Three of these issues were strongly associated with the subsequent parts of this experiment. For the first post, we asked the respondents whether they believed that health insurance cover should be higher for Western or TCM medication. For second post, we asked the respondents whether they believed that the government should help overseas Chinese citizens return to China or restrict them. For the third post, we asked the respondents whether they believed that successful graduation depends on subject difficulty and teaching quality or on students' personal endeavors. These measurements aided in understanding the respondents' pre-attitude score for the three key posts (see Appendix 4 for exact phrasing of the questions).

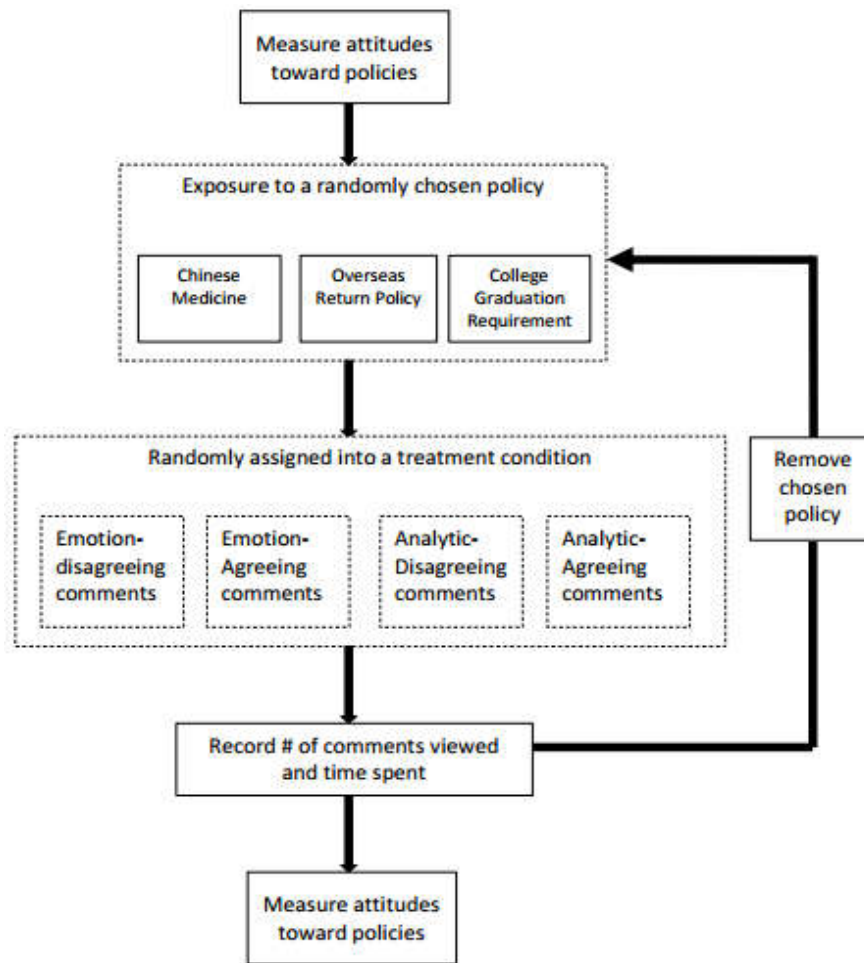
After they viewed each *Weibo* post, they were provided with a chance to view up to 30 comments regarding the post. The respondents could at least see first comment placed right after the post, and then, they could choose to either continue seeing more comments by clicking a "Continue to view next comment" button (here, only one comment was displayed at a time) or skip all comments by clicking a "View no more comments, go to the next question directly" button. These two options were displayed every time the respondents chose to view a new comment, which allowed the respondents to review all 30 comments or skip the subsequent comments after viewing a certain number of comments. After they viewed all

30 comments or skipped some of them, the respondents were directed to a question asking them about their attitude toward the issue reported in the post so as to understand their post-attitude toward the issue; the post-attitude question used here simply asked them whether they supported the policy they had viewed (see Appendix 4 for exact phrasing of the questions). After answering the question, they could proceed to the next post. The process was repeated until all three *Weibo* posts were viewed by the respondents.

The type of comment was randomly assigned to every participant; we included four types of comments: (1) emotional comments agreeing with the reported issue, (2) emotional comments disagreeing with the reported issue, (3) analytical comments agreeing with the reported issue, and (4) analytical comments disagreeing with the reported issue. To eliminate the order-effect, we randomized the display order of three *Weibo* posts and the comments on them. The survey flow is illustrated in Figure 1.

In this survey experiment, we did not include a control group, where the respondents did not view any comments—mainly because in the real-world settings, most social media posts have comments under them, which can be inadvertently viewed by netizens; as such, deliberately removing the comments only for the experimental settings may lead to inaccurate results. In particular, because comments are a major part of social media information diffusion, removing them would not predict the effects of respondents' social media information consumption on their political attitudes accurately. Therefore, in this study, we mimicked the real-world scenario as authentically as possible.

**Fig 1. Survey Flow**



#### 4.2 Comment Selection

We collected 736 comments on the three *Weibo* posts to constitute the comments poll, and we divided them into the four abovementioned type categories. For every comment, it was not difficult for us to judge whether it agrees or disagrees with the issue in the post. However, the process of judging whether the expression of the comments is emotional or analytical can be highly subjective and biased. Therefore, we employed the crowdsourcing method, which has shown effective results in many social science studies (Benoit, Conway, Lauderdale, Laver, &

Mikhaylov, 2016; Rozenas & Stukal, 2019), to sort the comments into separate categories. We included the issues and comments in an online survey and sent it out on a widely used outsourcing website in China called Zhubajie.com (Li, Shi, & Zhu, 2017). We showed survey participants three posts. After they were done viewing a post, they were shown 20 comments about that post randomly drawn from the comments poll. Then, they were asked to sort the comments into two categories, namely *Emotional expression* and *Analytical expression*—after they were provided with an explanation about what the two categories were: *Emotional expression* refers to a relatively simple expression containing relatively less information, whereas *Analytical expression* refers to an expression that uses reasoning and contains relatively more information.

In total, 1028 participants sorted the comments. We ranked the sorting results in a descending order and selected the top 30 comments for each of the four categories. We set the lowest standard at 60%; therefore, only when >60% of the participants agreed that a comment belonged to a certain category, was the comment used. Eventually, we collected 120 comments (30 comments  $\times$  4 categories) for each post and 360 comments (120 comments  $\times$  3 posts) for all three posts.

All the comments of the identical type appear to show some common features. For instance, emotional comments appear to be shorter than analytical comments. The words used in emotional comments tend to be provoking and slogan-like, and they do not directly discuss the issue reported in the post but tend to attack others who hold different opinions with a

mocking or aggressive tone. By contrast, analytical comments tend to be longer, illustrating some rationale. Rather than arguing, the commenters reason with dissidents by providing reasonable responses. The overall tone of these comments is less offensive and more reasonable (see Appendix 3 for exact phrasing of the comments).

Our main experimental survey responses were collected by KurunData.com, a well-established survey company in mainland China. We issued the survey using quota sampling, and the quota, including gender, age, and province, was based on the actual demographic distribution of mainland China's population. We excluded survey responses with repeated IP addresses as well as those that failed our quality check question (Oppenheimer, Meyvis, & Davidenko, 2009; Berinsky, Margolis, & Sances, 2014). The quality check question asked the respondents to indicate the number of Shanghai marathon championships they had won so far. Survey responses with any answer other than "none" for this question were considered invalid. Finally, 1132 valid responses were considered for subsequent analysis. The statistical profile of the included respondents is provided in Table 1.

## **5. Specifications and Results**

### *5.1 Exposure Time Spent on Comments*

The first outcome variable of interest in this study is the respondents' exposure time spent on comments they chose to view. This measurement aided in examining the respondents' attention commitment to the comments. Several key independent variables including dummy variables of the four types of comments, policy exposure order (to control for the order



effects), and types of policies (to control for the policy fixed effects) were considered. Because the length of the various comments varied, we calculated the number of words in each comment and included the comment word count variable in our model. We also used the random-effects regression model to estimate the effects of comment types on the respondents' comments exposure willingness. The main specification was as follows:

$$Y_{it} = \alpha_i + C'_{it}\beta + \mu O_t + P'_{it}\delta + \theta W_{it} + X'_i\gamma + \omega_{it} \quad (1)$$

where  $Y_{it}$  denotes an individual respondent  $i$ 's time spent (in seconds) on comments after  $i$ 's exposure to a policy at order  $t$ ,  $\alpha_i$  is individual  $i$ 's intercept,  $\beta$  is the vector of coefficients on comment type dummies  $C_{it}$ ,  $\mu$  is the coefficient on policy exposure order  $O_t$ ,  $\delta$  is the vector of the coefficients on policy types dummies  $P_{it}$ ,  $\theta$  is the coefficient on the comment word count variable  $W_{it}$ ,  $\gamma$  is the vector of coefficients on individual-level control variables  $X_i$  and  $\omega_{it}$  is the error term clustered at the individual level which is assumed to be independent and identically distributed.

Table 2-1 shows the results of equation (1). For specifications 1 and 2, the coefficient on the dummy variable *Emotional comments* is significantly positive, whereas that on the dummy variable *Agreeing comments* is nonsignificant, indicating that emotional comments drew significantly more attention from the respondents. For specification 3, when *Emotionally-disagreeing comments* is treated as the baseline group for comparison, the coefficients on the other three types of comments—*Emotionally-agreeing comments*, *Analytically-agreeing comments*, and *Analytically-disagreeing comments*—are significantly

negative. This result suggests that compared with the other three comment types, the respondents were more likely to spend more time viewing comments that emotionally disagree with the policies. This finding confirms our Hypothesis 1c but invalidates our Hypotheses 1a, 1b, and 1d. The specification 4 result further illustrates that when *Emotionally-agreeing comments* and *Analytically-agreeing comments* are treated as the baseline groups for comparison—and thus only the disagreeing comments are considered—the respondents still were noted to spend significantly more time on *Emotionally-disagreeing comments*; the coefficient on *Analytically-disagreeing comments* is nonsignificant, however.

Because our respondents were allowed to quit viewing comments at any time, we conducted a survival analysis considering the possibility of our respondents quitting viewing comments. In the survival model, we regarded respondents' time spent on comments as a time variable for analysis and reported the results on the basis of the coefficients instead of the hazard ratio, as shown in Table 2-2, for consistency. The coefficients in the survival model refer to the possibility of the respondents skipping the remaining comments after encountering a certain type of comment. Therefore, a positive and a negative coefficient in the survival model indicates that the respondents were more and less likely to stop viewing the comments, respectively. As shown in Table 2-2, specifications 1 and 2 indicate that the respondents were significantly less likely to quit viewing emotional comments; this result is consistent with that of our random-effects model. Specification 3 indicates that compared with *Emotionally-disagreeing comments*, respondents were significantly more likely to quit

viewing *Analytically-agreeing comments* and *Analytically-disagreeing comments*. Specification 4 confirms that that when *Emotionally-agreeing comments* and *Analytically-agreeing comments* are treated as the baseline groups for comparison, the respondents were more likely to quit viewing *Analytically-disagreeing comments* but less likely to quit viewing *Emotionally-disagreeing comments*. In summary, *Emotionally-disagreeing comments* remains the most appealing comment type in the survival analysis. Thus, our survival model confirms Hypothesis 1c.

## 5.2 Attitudinal Change

The second outcome variable of interest is the respondents' attitudinal change toward the issues reported in the *Weibo* posts. The attitude-change score was calculated by subtracting an individual's pre-attitude score from their post-attitude score. Both pre-attitude and post-attitude scores were measured on an 11-point scale, from 0 to 10 in the same direction—the larger their attitude-change score, the more supportive of the policy the individual has become. Thus, we used the random-effects regression model to detect the effects of different comment exposures while controlling for respondents' time spent on comments in the regression. The main specification was as follow:

$$Z_{it} = \sigma_i + C'_{it}\tau + \epsilon O_t + P'_{it}\vartheta + \pi W_{it} + \rho Y_{it} + X'_i\phi + \varepsilon_{it} \quad (2)$$

where  $Z_{it}$  denotes an individual respondent  $i$ 's attitudinal change after their exposure to a policy at order  $t$ ,  $\sigma_i$  is individual  $i$ 's intercept,  $\tau$  is the vector of the coefficients on comment type dummies  $C_{it}$ ,  $\epsilon$  is the coefficient on policy exposure order  $O_t$ ,  $\vartheta$  is the

vector of the coefficients on policy types dummies  $P_{it}$ ,  $\pi$  is the coefficient on comment word count variable  $W_{it}$ ,  $\rho$  is the coefficient on individuals' time spent on comments  $Y_{it}$ ,  $\varphi$  is the vector of coefficients on the control variables  $X_i$  and  $\varepsilon_{it}$  is the error term clustered at the individual level and assumed to be independent and identically distributed.

As presented in Table 3, the coefficient on the dummy variable *Emotional comments* is nonsignificant in specification 1, whereas that on *Agreeing comments* is significantly positive in specification 2 and that on *Disagreeing comments* is significantly negative in specification 3. The first three specifications indicate that respondents' exposure to either emotional or analytical comments did not have significant effects on individuals' attitudinal change toward the policies. However, respondents' exposure to comments agreeing with the policies resulted in a more supportive attitude toward the policies, but their exposure to comments that disagree with the policies led to a less supportive attitude toward the policies. These findings suggest that the standpoint of comments, rather than their expression manner, has effects on individuals' attitudinal change. These results echo with the theory of framing effects (Iyengar & Simon, 1993; Iyengar, 1996; De Vreese, Boomgaarden, & Semetko, 2011; Tang & Huhe, 2014).

The results of specifications 4 and 5 imply that although the framing effects significantly affected respondents' attitudes, the difference between emotional and analytical expression was small. In particular, exposure to *Emotionally-agreeing comments* increased respondents' support by 0.660 and that to *Analytically-agreeing comments* increased it by

0.758. The difference between these two coefficients (i.e. the effect size) is only 0.098, which is substantively nonsignificant. Similarly, exposure to *Emotionally-disagreeing comments* reduced respondents' attitude support by 0.708 and that to *Analytically-disagreeing comments* reduced respondents' attitude support by 0.696. The effect size here is also substantively nonsignificant (0.012). Although Table 2 results indicate that people tended to pay more attention to the *Emotionally-disagreeing* comments, the effects of these comments on changing people's attitudes were similar to those of *Analytically-disagreeing* comments. This result confirms our Hypothesis 2: exposure to agreeing or disagreeing comments results in a more or less supportive attitude toward the policy no matter how the comments are expressed.

**TABLE 1: Statistical Profile of Survey Respondents**

	Obs./Mean	Std. Dev.	Min.	Max.
Number of Respondents	1132			
Gender				
Male (obs.)	531			
Female (obs.)	601			
Age (mean)	37.527	10.602	18	84
Party affiliation				
CCP member (obs.)	271			
Non-CCP member (obs.)	861			
Marital status				
In marriage (obs.)	872			
Not in marriage (obs.)	260			
Education level (mean)	5.662	0.846	1	8
Parental education level (mean)	3.997	1.380	1	8
Residential status				
Urban residence (obs.)	908			
Rural residence (obs.)	224			
Income level (mean)	3.569	1.693	1	9
Family income level (mean)	4.898	1.860	1	9
Political interest (mean)	3.355	0.644	1	4
Frequent use of Weibo (mean)	3.643	1.540	1	5
Frequent use of Wechat (mean)	4.933	0.377	1	5
Frequent use of Internet forum (mean)	3.331	1.288	1	5
Frequent use of other social media (mean)	3.477	1.296	1	5
Most recent news consumption through Weibo (mean)	4.757	1.754	1	6
Most recent news consumption through Wechat (mean)	5.724	0.778	1	6
Most recent news consumption through Internet forum (mean)	4.621	1.511	1	6
Most recent news consumption through other social media (mean)	4.698	1.537	1	6

*Notes: Education and parental education are measured on an 8-point scale—from 1 (below primary school) to 8 (doctoral). Income and family income levels are measured on a 9-point scale—from 1 (<RMB20,000) to 9 (>RMB1,000,000). Political interest is measured on a 4-point scale—from 1 (not interested at all) to 4 (very interested). Frequent use of Weibo, Wechat, Internet forums, and other social media platforms are measured on a 5-point scale—from 1 (almost never) to 5*

*(almost everyday)*. *Most recent news consumption through Weibo, Wechat, Internet forum, and other social media* are measured on a 6-point scale—from 1 (*never*) to 6 (*sometime today*). For the exact phrasing of the questions, see Appendix 4.

**TABLE 2-1: Time Spent (in Seconds) on the Four Types of Comments**

<i>Dep. Var. Time Spent on Comments</i>	(1)	(2)	(3)	(4)
Emotional comments	10.838** (2.602)			
Agreeing comments		-5.888 (3.739)		
Emotionally-agreeing comments			-5.300* (2.605)	
Analytically-agreeing comments			-16.221** (5.373)	
Analytically-disagreeing comments			-10.380** (3.391)	0.841 (4.629)
Emotionally-disagreeing comments				10.600** (3.569)
Policy exposure order $O_t$	-4.545 (3.205)	-4.774 (3.210)	-4.491 (3.205)	-4.573 (3.186)
Word counts	0.119** (0.019)	0.114** (0.018)	0.119** (0.019)	0.117** (0.018)
Double-negative test report policy	-12.707* (5.753)	-12.523* (5.723)	-12.674* (5.752)	-12.536* (5.722)
University graduation policy	-5.859 (5.107)	-6.291 (5.205)	-6.058 (5.238)	-6.047 (5.234)
Pre-attitude of TCM policy	-0.169 (0.608)	-0.205 (0.611)	-0.195 (0.611)	-0.220 (0.611)
Pre-attitude of double-negative report policy	0.611 (0.792)	0.650 (0.793)	0.597 (0.785)	0.643 (0.792)
Pre-attitude of university graduation policy	0.721 (0.722)	0.665 (0.718)	0.716 (0.722)	0.681 (0.716)
Male	-4.610 (4.550)	-4.481 (4.530)	-4.531 (4.502)	-4.558 (4.516)
Age	0.250 (0.256)	0.255 (0.256)	0.252 (0.255)	0.252 (0.255)



CCP membership	-8.223 (4.355)	-8.087 (4.321)	-8.075 (4.346)	-7.957 (4.332)
Marital status	1.197 (4.704)	0.819 (4.595)	0.885 (4.610)	0.795 (4.601)
Education level	-2.070 (2.531)	-1.921 (2.538)	-2.067 (2.537)	-2.058 (2.544)
Parental education level	0.651 (1.951)	0.574 (1.929)	0.594 (1.929)	0.580 (1.930)
Urban status	9.705* (3.823)	9.553* (3.889)	9.868* (3.880)	9.699* (3.871)
Income level	-0.093 (2.034)	-0.188 (2.043)	-0.143 (2.043)	-0.117 (2.044)
Family income level	-0.883 (1.354)	-0.707 (1.338)	-0.839 (1.346)	-0.842 (1.339)
Political interest	0.370 (2.511)	0.469 (2.518)	0.416 (2.513)	0.531 (2.514)
Frequent use of Weibo	-1.883 (1.820)	-1.756 (1.828)	-1.861 (1.818)	-1.805 (1.823)
Frequent use of Wechat	5.088 (5.850)	5.361 (5.941)	5.285 (5.886)	5.270 (5.913)
Frequent use of Internet forum	-3.637 (2.040)	-3.596 (2.038)	-3.620 (2.031)	-3.632 (2.032)
Frequent use of other social media	0.655 (2.332)	0.580 (2.342)	0.657 (2.336)	0.607 (2.337)
Most recent news consumption through Weibo	-3.158 (2.495)	-3.394 (2.531)	-3.271 (2.542)	-3.285 (2.549)
Most recent news consumption through Wechat	-1.871 (2.614)	-1.789 (2.591)	-1.773 (2.590)	-1.769 (2.595)
Most recent news consumption through Internet forum	2.022 (2.286)	1.942 (2.292)	1.988 (2.277)	2.017 (2.284)
Most recent news consumption through other social media	-1.172 (1.946)	-0.909 (1.939)	-1.166 (1.935)	-1.101 (1.929)
Number of Obs.	3396	3396	3396	3396

R <sup>2</sup> within	0.1108	0.1108	0.1116	0.1115
R <sup>2</sup> between	0.3001	0.2968	0.3005	0.2977
R <sup>2</sup> overall	0.1988	0.1971	0.1994	0.1980
Wald Chi <sup>2</sup>	376.22	380.03	388.89	389.35

*Notes:* The dependent variable is respondents' time spent on viewing comments (in seconds) at policy order  $t$ , ( $t = 1, 2,$  and  $3$ ). Independent variables include the dummy variables *Emotional comments* (which is equal to 1 if respondents are exposed to either emotionally-agreeing or disagreeing-comments or to 0 otherwise), *Agreeing comments* (which is equal to 1 if respondents are exposed to either *emotionally-agreeing* or *analytically-agreeing* comments or to 0 otherwise), *Analytically-agreeing comments* (which is equal to 1 if respondents are exposed to *analytically-agreeing* comments or to 0 otherwise), *Analytically-disagreeing comments* (which is equal to 1 if respondents are exposed to *analytically-disagreeing* comments or to 0 otherwise), *Emotionally-agreeing comments* (which is equal to 1 if respondents are exposed to *emotionally-agreeing* comments or to 0 otherwise), and *Emotionally-disagreeing comments* (which is equal to 1 if respondents are exposed to *emotionally-disagreeing* comments or to 0 otherwise), *policy exposure order*  $O_t$ , *word counts* of comments respondents are exposed to, and *respondents' pre-attitude score* of three policies. The TCM policy is used as the baseline category for the control of policy fixed effects. *Male* is equal to 1 if the respondent is male or to 0 if the respondent is female. *CCP member* is equal to 1 if the respondent is a member of Chinese Communist Party or to 0 otherwise. *Marital status* is equal to 1 if the respondent is married or to 0 otherwise. *Urban status* is equal to 1 if the respondent has an urban residence or to 0 otherwise. For description of other variables, see Appendix 4. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**TABLE 2-2: Survival Model of Time Spent (in Seconds) on the Four Types of Comments**

<i>Time Var. Time Spent on Comments</i>	(1)	(2)	(3)	(4)
Emotional comments	-0.377** (0.048)			
Agreeing comments		0.077 (0.044)		
Emotionally-agreeing comments			0.091 (0.061)	
Analytically-agreeing comments			0.437** (0.064)	
Analytically-disagreeing comments			0.404** (0.066)	0.120* (0.055)
Emotionally-disagreeing comments				-0.242** (0.053)
Policy exposure order ( $O_t$ )	0.435** (0.028)	0.447** (0.028)	0.436** (0.028)	0.438** (0.028)
Word counts	-0.002** (0.000)	-0.002** (0.000)	-0.002** (0.000)	-0.002** (0.000)
Double-negative test report policy	0.030 (0.047)	0.012 (0.047)	0.029 (0.047)	0.017 (0.047)
University graduation policy	-0.004 (0.046)	0.005 (0.047)	-0.003 (0.047)	-0.002 (0.047)
Pre-attitude of TCM policy	0.045** (0.013)	0.045** (0.013)	0.045** (0.013)	0.046** (0.013)
Pre-attitude of double-negative report policy	0.033** (0.012)	0.031** (0.012)	0.032** (0.012)	0.031** (0.012)
Pre-attitude of university graduation policy	-0.030* (0.015)	-0.029 (0.015)	-0.031* (0.015)	-0.030 (0.015)
Male	0.064 (0.070)	0.061 (0.071)	0.064 (0.071)	0.066 (0.071)
Age	-0.019** (0.005)	-0.018** (0.005)	-0.019** (0.005)	-0.019** (0.005)

CCP membership	0.013 (0.082)	0.010 (0.082)	0.009 (0.082)	0.005 (0.082)
Marital status	0.100 (0.106)	0.116 (0.107)	0.103 (0.106)	0.109 (0.106)
Education level	0.054 (0.048)	0.046 (0.048)	0.056 (0.048)	0.057 (0.048)
Parental education level	0.017 (0.028)	0.020 (0.028)	0.017 (0.028)	0.019 (0.028)
Urban status	-0.130 (0.099)	-0.117 (0.100)	-0.133 (0.099)	-0.131 (0.099)
Income level	0.058 (0.039)	0.060 (0.039)	0.059 (0.039)	0.060 (0.039)
Family income level	-0.054 (0.036)	-0.060 (0.036)	-0.055 (0.036)	-0.056 (0.036)
Political interest	0.043 (0.060)	0.038 (0.061)	0.041 (0.061)	0.038 (0.060)
Frequent use of Weibo	0.038 (0.045)	0.033 (0.046)	0.038 (0.045)	0.035 (0.045)
Frequent use of Wechat	-0.306** (0.105)	-0.296** (0.106)	-0.305** (0.105)	-0.296** (0.105)
Frequent use of Internet forum	0.064 (0.043)	0.062 (0.044)	0.065 (0.043)	0.067 (0.043)
Frequent use of other social media	0.017 (0.043)	0.019 (0.043)	0.018 (0.043)	0.019 (0.043)
Most recent news consumption through Weibo	-0.000 (0.052)	0.002 (0.052)	0.001 (0.052)	-0.000 (0.052)
Most recent news consumption through Wechat	0.018 (0.047)	0.019 (0.048)	0.017 (0.047)	0.017 (0.047)
Most recent news consumption through Internet forum	-0.024 (0.046)	-0.020 (0.046)	-0.025 (0.046)	-0.025 (0.046)
Most recent news consumption through other social media	0.032 (0.043)	0.020 (0.044)	0.033 (0.044)	0.030 (0.044)
Number of Obs.	3396	3396	3396	3396

Wald Chi <sup>2</sup>	1820.38	1823.40	1822.91	1826.14
Log likelihood	-3551.742	-3580.7241	-3550.481	-3565.1739

*Notes:* The time variable of the survival model is respondents' time spent on viewing comments (in seconds) at policy order  $t$  ( $t = 1, 2,$  and  $3$ ). Description of other variables is identical to description of those in the *Notes* of Table 2-1. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses.  $**p < .01$ ,  $*p < .05$ .

**TABLE 3: Attitudinal Change after Comment Exposures**

<i>Dep. Var. Attitudinal Change</i>	(1)	(2)	(3)	(4)	(5)
Emotional comments	-0.081 (0.105)				
Agreeing comments		0.702** (0.100)			
Disagreeing comments			-0.702** (0.100)		
Emotionally-agreeing				0.660** (0.147)	
Analytically-agreeing comments				0.758** (0.142)	
Emotionally-disagreeing comments					-0.708** (0.126)
Analytically-disagreeing comments				0.016 (0.146)	-0.696** (0.123)
Policy exposure order ( $O_t$ )	-0.027 (0.068)	-0.034 (0.067)	-0.034 (0.067)	-0.034 (0.067)	-0.034 (0.067)
Word counts	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Double-negative test report policy	0.716** (0.119)	0.711** (0.118)	0.711** (0.118)	0.712** (0.118)	0.711** (0.118)
University graduation policy	-3.222** (0.128)	-3.196** (0.127)	-3.196** (0.127)	-3.196** (0.127)	-3.196** (0.127)
Pre-attitude of TCM policy	-0.251** (0.020)	-0.247** (0.019)	-0.247** (0.019)	-0.247** (0.019)	-0.247** (0.019)
Pre-attitude of double-negative report policy	-0.271** (0.018)	-0.270** (0.018)	-0.270** (0.018)	-0.269** (0.018)	-0.270** (0.018)
Pre-attitude of university graduation policy	-0.219** (0.021)	-0.218** (0.021)	-0.218** (0.021)	-0.219** (0.021)	-0.218** (0.021)
Male	0.005 (0.097)	-0.005 (0.095)	-0.005 (0.095)	-0.005 (0.095)	-0.005 (0.095)

Age	-0.006 (0.006)	-0.006 (0.006)	-0.006 (0.006)	-0.006 (0.006)	-0.006 (0.006)
CCP membership	-0.048 (0.109)	-0.067 (0.108)	-0.067 (0.108)	-0.066 (0.108)	-0.067 (0.108)
Marital status	0.116 (0.136)	0.156 (0.135)	0.156 (0.135)	0.155 (0.135)	0.156 (0.135)
Education level	0.056 (0.066)	0.056 (0.065)	0.056 (0.065)	0.056 (0.065)	0.056 (0.065)
Parental education level	-0.068 (0.037)	-0.060 (0.037)	-0.060 (0.037)	-0.061 (0.037)	-0.060 (0.037)
Urban status	0.357** (0.134)	0.338* (0.132)	0.338* (0.132)	0.337* (0.132)	0.338* (0.132)
Income level	-0.006 (0.052)	0.000 (0.052)	0.000 (0.052)	0.001 (0.052)	0.000 (0.052)
Family income level	0.030 (0.049)	0.024 (0.049)	0.024 (0.049)	0.024 (0.049)	0.024 (0.049)
Political interest	0.240** (0.079)	0.233** (0.078)	0.233** (0.078)	0.234** (0.078)	0.233** (0.078)
Frequent use of Weibo	0.050 (0.064)	0.047 (0.064)	0.047 (0.064)	0.048 (0.064)	0.047 (0.064)
Frequent use of Wechat	0.318* (0.153)	0.293* (0.149)	0.293* (0.149)	0.293* (0.148)	0.294* (0.149)
Frequent use of Internet forum	-0.020 (0.058)	-0.022 (0.057)	-0.022 (0.057)	-0.022 (0.057)	-0.022 (0.057)
Frequent use of other social media	-0.018 (0.057)	-0.018 (0.056)	-0.018 (0.056)	-0.019 (0.056)	-0.018 (0.056)
Most recent news consumption through Weibo	-0.158* (0.080)	-0.143 (0.080)	-0.143 (0.080)	-0.144 (0.081)	-0.143 (0.080)
Most recent news consumption through Wechat	-0.082 (0.071)	-0.094 (0.070)	-0.094 (0.070)	-0.094 (0.070)	-0.094 (0.070)
Most recent news consumption through Internet forum	0.049 (0.059)	0.053 (0.058)	0.053 (0.058)	0.053 (0.058)	0.053 (0.058)
Most recent news consumption through other social	0.084	0.083	0.083	0.084	0.083

media

	(0.056)	(0.057)	(0.057)	(0.057)	(0.057)
Number of Obs.	3396	3396	3396	3396	3396
R <sup>2</sup> within	0.3183	0.3262	0.3262	0.3261	0.3262
R <sup>2</sup> between	0.4646	0.4770	0.4770	0.4777	0.4770
R <sup>2</sup> overall	0.3605	0.3697	0.3697	0.3698	0.3697
Wald Chi <sup>2</sup>	1686.94	1755.43	1755.43	1759.98	1757.16

*Notes:* The independent variable is respondents' attitudinal change at policy order  $t$  ( $t = 1, 2,$  and  $3$ ). Description of other variables is identical to description of those in the *Notes* of Table 2-1. *Disagreeing comments* is a dummy variable and is equal to 1 if the respondents are exposed to either *emotionally-disagreeing* comments or *analytically-disagreeing* comments or to 0 otherwise; *Agreeing comments* is a dummy variable and is equal to 1 if the respondents are exposed to either *emotionally-agreeing* comments or *analytically-agreeing* comments or to 0 otherwise. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses.  $**p < .01$ ,  $*p < .05$ .



## **6. Conclusion**

The dichotomy of China's online political discussion often falls into two campaigns: one that supports the regime and one that challenges it; this is particularly noted for social media posts regarding policies proposed by the regime. In addition, the way that individuals show their supports for or objections to these posts varies: some raise their arguments in an analytical manner with reason and logic, whereas some propose their opinions in an emotional manner with provoking words and satire (Luqiu, 2017). We considered these two dimensions in this study and performed an online survey experiment to identify the type of expression that received the most attention from Chinese netizens.

We find that emotionally expressed content is more appealing compared with analytically expressed content. Moreover, we find that the respondents were more likely to pay more attention to emotionally expressed content disagreeing with the proposed policies. Our findings corroborate the theory that people in authoritarian regimes tend to regard online space as an alternative channel for consuming counter-official information and their consumption of this information is mostly emotionally driven. Despite the attractiveness of emotionally-disagreeing comments, this type of comments matters less in terms of their effects on changing people's attitude toward the policies. In other words, individuals may become more or less supportive of policies only because they are exposed to comments that agree or disagree with the policies; their decision is not related to whether the comments are expressed emotionally or analytically.

This study contributes to the literature on people's online information consumption habits in authoritarian regimes. In authoritarian regimes, where information is highly controlled and manipulated (Chen & Xu, 2017; Rozenas & Stukal, 2019), citizens' information selective exposure determines whether information manipulation techniques such as propaganda and censorship work (Huang, 2015; Huang, 2018; Rosenfeld, 2018; Kalathil & Boas, 2001; Boas, 2006; Lorentzen, 2014; Chen & Yang, 2019; Wong & Liang, 2021). If citizens can bypass the manipulation and expose themselves to discourses deviating from officially promoted messages, they are likely to become more resilient to information control from the authorities and therefore affect the democratization process (Han, 2018; Roberts, 2020).

This study also provides some political implications to the literature on persuasion theory with regard to the effects of online emotional and analytical expression on individuals' political attitudes. Although many studies have suggested that emotionally expressed content influences individuals' attitudes (Nabi, 2003; Lecheler, Schuck, & De Vreese, 2013; Song, Dai, & Wang, 2016; Hameleers, Bos, & De Vreese, 2017; Clifford, 2019), the current study notes that the persuasive effects of emotionally expressed content are similar to those of analytically expressed content. This finding implies that in online environments, an individual can easily influence other individuals' political opinions by simply applying emotional phrasing and expression, rather than presenting logical, factual, or evidence-based content which requires more cognitive effort. This could be the reason that political polarization is so prevalent in the cyberspace.

This study also has some important implications from the perspective of the government. Our results may explain why the Chinese government still proactively applies censorship: it not only prevents emotional criticisms but also minimizes argumentative and evidence-based anti-regime voices (Roberts, 2014; Tai & Fu, 2020). Both emotional and analytical expression may be similarly effective in reducing individuals' regime support. This is the reason that China employs cheerleader-like propaganda trolls, although crude and artificial, to spread regime propaganda and distract individuals from any negative information about the regime (Roberts, 2014; King, Pan, & Roberts, 2017; Wang & Kobayashi, 2021). If the persuasive effects of the pro-regime cheerleading trolls are the same as that of evidence-based arguments, an authoritarian government can save the time and money needed for providing sound evidence or facts to the public and gain its support. In other words, simply employing commenters to produce plain, fast-spreading, and emotional astroturfing on the Internet for making the masses more supportive of the regime is more cost-effective for authoritarian governments.

## References

- Anderson, A. A., Brossard, D. E., Scheufele, D. A., & Xenos, M. A. (2012). Online talk: How exposure to disagreement in online comments affects beliefs in the promise of controversial science. In L. Philips, A. Carvalho and J. Doyle (Ed.). *Citizen voices: Performing public participation in science and environment communication*. (pp. 119-136). Bristol, UK: Intellect.
- Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2014). The “nasty effect:” Online incivility and risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication*, 19(3), 373-387.
- Arceneaux, K., Johnson, M., & Murphy, C. (2012). Polarized political communication, oppositional media hostility, and selective exposure. *The Journal of Politics*, 74(1), 174-186.
- Asker, D., & Dinas, E. (2019). Thinking fast and furious: Emotional intensity and opinion polarization in online media. *Public Opinion Quarterly*, 83(3), 487-509.
- Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. F., ... & Volfovsky, A. (2018). Exposure to opposing views on social media can increase political polarization. *Proceedings of the National Academy of Sciences*, 115(37), 9216-9221.
- Banks, A., Calvo, E., Karol, D., & Telhami, S. (2020). #Polarizedfeeds: Three experiments on polarization, framing, and social media. *The International Journal of Press/Politics*, 26(3), 609-634.

- Barberá, P., Jost, J. T., Nagler, J., Tucker, J. A., & Bonneau, R. (2015). Tweeting from left to right: Is online political communication more than an echo chamber?. *Psychological Science, 26*(10), 1531-1542.
- Beam, M. A., Hutchens, M. J., & Hmielowski, J. D. (2016). Clicking vs. sharing: The relationship between online news behaviors and political knowledge. *Computers in Human Behavior, 59*, 215-220.
- Benoit, K., Conway, D., Lauderdale, B. E., Laver, M., & Mikhaylov, S. (2016). Crowd-sourced text analysis: Reproducible and agile production of political data. *American Political Science Review, 110*(2), 278-295.
- Berinsky, A. J., Margolis, M. F., & Sances, M. W. (2014). Separating the shirkers from the workers? Making sure respondents pay attention on self-administered surveys. *American Journal of Political Science, 58*(3), 739-753.
- Blom, R., Carpenter, S., Bowe, B. J., & Lange, R. (2014). Frequent contributors within US newspaper comment forums: An examination of their civility and information value. *American Behavioral Scientist, 58*(10), 1314-1328.
- Boas, T. C. (2006). Weaving the authoritarian web: The control of Internet use in nondemocratic regimes. In J. Zysman and A. Newman (Ed.). *How revolutionary was the digital revolution*. (pp. 361-378). Stanford, CA: Stanford University Press.
- Borah, P. (2014). Does it matter where you read the news story? Interaction of incivility and news frames in the political blogosphere. *Communication Research, 41*(6), 809-827.
- Brady, W. J., Wills, J. A., Jost, J. T., Tucker, J. A., & Van Bavel, J. J. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National*

- Academy of Sciences*, 114(28), 7313-7318.
- Cairns, C., & Carlson, A. (2016). Real-world islands in a social media sea: Nationalism and censorship on Weibo during the 2012 Diaoyu/Senkaku crisis. *The China Quarterly*, 225, 23-49.
- Cardenal, A. S., Aguilar-Paredes, C., Galais, C., & Pérez-Montoro, M. (2019). Digital technologies and selective exposure: How choice and filter bubbles shape news media exposure. *The International Journal of Press/Politics*, 24(4), 465-486.
- Chen, G. M., & Lu, S. (2017). Online political discourse: Exploring differences in effects of civil and uncivil disagreement in news website comments. *Journal of Broadcasting & Electronic Media*, 61(1), 108-125.
- Chen, J., & Xu, Y. (2017). Information manipulation and reform in authoritarian regimes. *Political Science Research and Methods*, 5(1), 163-178.
- Chen, L., Wu, X., & Li, M. (2018). Formation and fragmentation within a networked public sphere: Social media debates on traditional Chinese medicine. *Telematics and Informatics*, 35(8), 2219-2231.
- Chen, Y., & Yang, D. Y. (2019). The impact of media censorship: 1984 or brave new world?. *American Economic Review*, 109(6), 2294-2332.
- Clifford, S. (2019). How emotional frames moralize and polarize political attitudes. *Political Psychology*, 40(1), 75-91.
- Colleoni, E., Rozza, A., & Arvidsson, A. (2014). Echo chamber or public sphere? Predicting political orientation and measuring political homophily in Twitter using big data. *Journal of Communication*, 64(2), 317-332.

- Crano, W. D., & Prislin, R. (2006). Attitudes and persuasion. *Annual Review of Psychology*, 57, 345-374.
- Creemers, R. (2017). Cyber China: Upgrading propaganda, public opinion work and social management for the twenty-first century. *Journal of Contemporary China*, 26(103), 85-100.
- De Vreese, C. H., Boomgaarden, H. G., & Semetko, H. A. (2011). (In) direct framing effects: The effects of news media framing on public support for Turkish membership in the European Union. *Communication Research*, 38(2), 179-205.
- Diamond, L. (2010). Liberation technology. *Journal of Democracy*, 21(3), 69-83.
- Druckman, J. N. (2004). Political preference formation: Competition, deliberation, and the (ir) relevance of framing effects. *American Political Science Review*, 98(4), 671-686.
- Dvir-Gvirzman, S., Tsfati, Y., & Menchen-Trevino, E. (2016). The extent and nature of ideological selective exposure online: Combining survey responses with actual web log data from the 2013 Israeli elections. *New Media & Society*, 18(5), 857-877.
- Dylko, I., Dolgov, I., Hoffman, W., Eckhart, N., Molina, M., & Aaziz, O. (2017). The dark side of technology: An experimental investigation of the influence of customizability technology on online political selective exposure. *Computers in Human Behavior*, 73, 181-190.
- Egorov, G., Guriev, S., & Sonin, K. (2009). Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American political science Review*, 103(4), 645-668.
- Ellison, N. B., Triêu, P., Schoenebeck, S., Brewer, R., & Israni, A. (2020). Why we don't

- click: Interrogating the relationship between viewing and clicking in social media contexts by exploring the “non-click”. *Journal of Computer-Mediated Communication*, 25(6), 402-426.
- Fan, R., Zhao, J., Chen, Y., & Xu, K. (2014). Anger is more influential than joy: Sentiment correlation in Weibo. *PloS one*, 9(10), 1-8.
- Fang, K., & Repnikova, M. (2018). Demystifying “Little Pink”: The creation and evolution of a gendered label for nationalistic activists in China. *New Media & Society*, 20(6), 2162-2185.
- Fuchs, C. (2014). Social media and the public sphere. *tripleC*, 12(1), 57-101.
- Gan, C., Lee, F. L., & Li, Y. (2017). Social media use, political affect, and participation among university students in urban China. *Telematics and Informatics*, 34(7), 936-947.
- Garrett, R. K. (2009a). Echo chambers online?: Politically motivated selective exposure among Internet news users. *Journal of Computer-Mediated Communication*, 14(2), 265-285.
- Garrett, R. K. (2009b). Politically motivated reinforcement seeking: Reframing the selective exposure debate. *Journal of Communication*, 59(4), 676-699.
- Gearhart, S., Moe, A., & Zhang, B. (2020). Hostile media bias on social media: Testing the effect of user comments on perceptions of news bias and credibility. *Human Behavior and Emerging Technologies*, 2(2), 140-148.
- Gil de Zúñiga, H., Barnidge, M., & Diehl, T. (2018). Political persuasion on social media: A moderated moderation model of political discussion disagreement and civil reasoning. *The Information Society*, 34(5), 302-315.



- Gottfried, J. A., Hardy, B. W., Holbert, R. L., Winneg, K. M., & Jamieson, K. H. (2017). The changing nature of political debate consumption: Social media, multitasking, and knowledge acquisition. *Political Communication, 34*(2), 172-199.
- Graf, J., Erba, J., & Harn, R. W. (2017). The role of civility and anonymity on perceptions of online comments. *Mass Communication and Society, 20*(4), 526-549.
- Guess, A. M. (2018). (Almost) everything in moderation: New evidence on Americans' online media diets. *American Journal of Political Science, 00*(00), 1-16.
- Gunitsky, S. (2015). Corrupting the cyber-commons: Social media as a tool of autocratic stability. *Perspectives on Politics, 13*(1), 42-54.
- Guriev, S., & Treisman, D. (2019). Informational autocrats. *Journal of Economic Perspectives, 33*(4), 100-127.
- Guriev, S., & Treisman, D. (2020). The popularity of authoritarian leaders: A cross-national investigation. *World Politics, 72*(4), 601-638.
- Gvirzman, S. D. (2014). It's not that we don't know, it's that we don't care: Explaining why selective exposure polarizes attitudes. *Mass Communication and Society, 17*(1), 74-97.
- Haddock, G., Maio, G. R., Arnold, K., & Huskinson, T. (2008). Should persuasion be affective or cognitive? The moderating effects of need for affect and need for cognition. *Personality and Social Psychology Bulletin, 34*(6), 769-778.
- Hameleers, M., Bos, L., & De Vreese, C. H. (2017). "They did it": The effects of emotionalized blame attribution in populist communication. *Communication Research, 44*(6), 870-900.
- Han, R. (2015). Defending the authoritarian regime online: China's "voluntary fifty-cent

- army". *The China Quarterly*, 224, 1006-1025.
- Han, R. (2018). *Contesting cyberspace in China*. New York, NY: Columbia University Press.
- Heinbach, D., Ziegele, M., & Quiring, O. (2018). Sleeper effect from below: Long-term effects of source credibility and user comments on the persuasiveness of news articles. *New Media & Society*, 20(12), 4765-4786.
- Ho, S. S., Yang, X., Thanwarani, A., & Chan, J. M. (2017). Examining public acquisition of science knowledge from social media in Singapore: An extension of the cognitive mediation model. *Asian Journal of Communication*, 27(2), 193-212.
- Houston, J. B., Hansen, G. J., & Nisbett, G. S. (2011). Influence of user comments on perceptions of media bias and third-person effect in online news. *Electronic News*, 5(2), 79-92.
- Howard, P. N., & Parks, M. R. (2012). Social media and political change: Capacity, constraint, and consequence. *Journal of Communication*, 62(2), 359-362.
- Hsueh, M., Yogeewaran, K., & Malinen, S. (2015). "Leave your comment below": Can biased online comments influence our own prejudicial attitudes and behaviors?. *Human Communication Research*, 41(4), 557-576.
- Huang, H. (2015). Propaganda as signaling. *Comparative Politics*, 47(4), 419-444.
- Huang, H. (2018). The pathology of hard propaganda. *The Journal of Politics*, 80(3), 1034-1038.
- Hwang, H., Kim, Y., & Huh, C. U. (2014). Seeing is believing: Effects of uncivil online debate on political polarization and expectations of deliberation. *Journal of Broadcasting & Electronic Media*, 58(4), 621-633.

- 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.
- 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.
- Iyengar, S. (1996). Framing responsibility for political issues. *The Annals of the American Academy of Political and Social Science, 546*(1), 59-70.
- Iyengar, S., & Simon, A. (1993). News coverage of the Gulf crisis and public opinion: A study of agenda-setting, priming, and framing. *Communication Research, 20*(3), 365-383.
- Jahng, M. R. (2018). From reading comments to seeking news: Exposure to disagreements from online comments and the need for opinion-challenging news. *Journal of Information Technology & Politics, 15*(2), 142-154.
- Jahng, M. R., Stoycheff, E., & Rochadiat, A. (2021). They said it's 'fake': Effects of discounting cues in online comments on information quality judgments and information authentication. *Mass Communication and Society, 24*(4), 527-552.
- Jennings, F. J., & Russell, F. M. (2019). Civility, credibility, and health information: The impact of uncivil comments and source credibility on attitudes about vaccines. *Public Understanding of Science, 28*(4), 417-432.
- Jiang, M. (2016). The coevolution of the Internet, (un) civil society, and authoritarianism in China. In J. deLisle, A. Goldstein and G. Yang (Ed.). *The internet, social media, and a*

- changing China* (pp. 28-48). Philadelphia, PA: University of Pennsylvania Press.
- Jiang, M., & Esarey, A. (2018). Uncivil society in digital China: Incivility, fragmentation, and political stability. *International Journal of Communication*, 12, 1928-1944.
- Jiang, Y. (2012). *Cyber-nationalism in China: Challenging Western media portrayals of internet censorship in China*. Adelaide, Australia: University of Adelaide Press.
- Kalathil, S., & Boas, T. C. (2001). The Internet and state control in authoritarian regimes: China, Cuba, and the counterrevolution. *First Monday*, 6(8), 1-21.
- Kalogeropoulos, A., Negrodo, S., Picone, I., & Nielsen, R. K. (2017). Who shares and comments on news?: A cross-national comparative analysis of online and social media participation. *Social Media+ Society*, 3(4), 1-12.
- Kim, Y. (2015). Exploring the effects of source credibility and others' comments on online news evaluation. *Electronic News*, 9(3), 160-176.
- Kim, Y. M., & Vishak, J. (2008). Just laugh! You don't need to remember: The effects of entertainment media on political information acquisition and information processing in political judgment. *Journal of Communication*, 58(2), 338-360.
- Kim, Y., & Hwang, H. (2019). When partisans see media coverage as hostile: The effect of uncivil online comments on hostile media effect. *Media Psychology*, 22(6), 845-866.
- Kim, Y., & Kim, Y. (2019). Incivility on Facebook and political polarization: The mediating role of seeking further comments and negative emotion. *Computers in Human Behavior*, 99, 219-227.
- Kim, Y., Hsu, S. H., & de Zúñiga, H. G. (2013). Influence of social media use on discussion network heterogeneity and civic engagement: The moderating role of personality

- traits. *Journal of Communication*, 63(3), 498-516.
- King, G., Pan, J., & Roberts, M. E. (2013). How censorship in China allows government criticism but silences collective expression. *American Political Science Review*, 107(2), 326-343.
- King, G., Pan, J., & Roberts, M. E. (2017). How the Chinese government fabricates social media posts for strategic distraction, not engaged argument. *American Political Science Review*, 111(3), 484-501.
- Kosmidis, S., & Theocharis, Y. (2020). Can social media incivility induce enthusiasm? Evidence from survey experiments. *Public Opinion Quarterly*, 84(S1), 284-308.
- Lecheler, S., & De Vreese, C. H. (2019). *News framing effects: Theory and practice*. New York, NY: Taylor & Francis.
- Lecheler, S., Schuck, A. R., & De Vreese, C. H. (2013). Dealing with feelings: Positive and negative discrete emotions as mediators of news framing effects. *Communications*, 38(2), 189-209.
- Lee, E. J. (2012). That's not the way it is: How user-generated comments on the news affect perceived media bias. *Journal of Computer-Mediated Communication*, 18(1), 32-45.
- Lee, E. J., & Jang, Y. J. (2010). What do others' reactions to news on internet portal sites tell us? Effects of presentation format and readers' need for cognition on reality perception. *Communication Research*, 37(6), 825-846.
- Lee, F. L., Liang, H., & Tang, G. K. (2019). Online incivility, cyberbalkanization, and the dynamics of opinion polarization during and after a mass protest event. *International Journal of Communication*, 13, 4940-4959.

- Lee, J., & Pingree, R. J. (2016). Cues about cues in political comments on social media: Effects of commenters' attractiveness and claims of cognitive effort. *The Journal of Social Media in Society*, 5(3), 92-120.
- Lee, S. Y., Hansen, S. S., & Lee, J. K. (2016). What makes us click "like" on Facebook? Examining psychological, technological, and motivational factors on virtual endorsement. *Computer Communications*, 73(2016), 332-341.
- Lee, S., Atkinson, L., & Sung, Y. H. (2020). Online bandwagon effects: Quantitative versus qualitative cues in online comments sections. *New Media & Society*, 00(0), 1-20.
- Lei, Y. W. (2011). The political consequences of the rise of the internet: Political beliefs and practices of Chinese netizens. *Political Communication*, 28(3), 291-322.
- Leung, L. (2009). User-generated content on the internet: An examination of gratifications, civic engagement and psychological empowerment. *New Media & Society*, 11(8), 1327-1347.
- Li, X., Shi, W., & Zhu, B. (2017). The face of internet recruitment: Evaluating the labor markets of online crowdsourcing platforms in China. *Research & Politics*, 5(1), 1-8.
- Liu, X., Xu, W. W., & Li, B. (2019). Reason and passion in public discussion on Sina Weibo. *Telematics and Informatics*, 45, 1-12.
- Lorentzen, P. (2014). China's strategic censorship. *American Journal of Political Science*, 58(2), 402-414.
- Lu, J., & Shi, T. (2015). The battle of ideas and discourses before democratic transition: Different democratic conceptions in authoritarian China. *International Political Science Review*, 36(1), 20-41.

- Lu, Y., Pan, J., & Xu, Y. (2021). Online criticism and support for the Chinese government in the early days of COVID-19. *21st Century China Center Research Paper, 4*, 1-S10.
- Lupia, A., McCubbins, M. D., & Arthur, L. (1998). *The democratic dilemma: Can citizens learn what they need to know?*. Cambridge, UK: Cambridge University Press.
- Luqiu, L. R. (2017). The cost of humour: Political satire on social media and censorship in China. *Global Media and Communication, 13*(2), 123-138.
- Luqiu, L. R., Schmierbach, M., & Ng, Y. L. (2019). Willingness to follow opinion leaders: A case study of Chinese Weibo. *Computers in Human Behavior, 101*, 42-50.
- Majchrzak, A., Faraj, S., Kane, G. C., & Azad, B. (2013). The contradictory influence of social media affordances on online communal knowledge sharing. *Journal of Computer-Mediated Communication, 19*(1), 38-55.
- Marquart, F., Brosius, A., & De Vreese, C. (2019). United feelings: The mediating role of emotions in social media campaigns for EU attitudes and behavioral intentions. *Journal of Political Marketing, 0*, 1-27.
- Mayer, N. D., & Tormala, Z. L. (2010). “Think” versus “feel” framing effects in persuasion. *Personality and Social Psychology Bulletin, 36*(4), 443-454.
- Medaglia, R., & Zhu, D. (2017). Public deliberation on government-managed social media: A study on Weibo users in China. *Government Information Quarterly, 34*(3), 533-544.
- Miller, B. (2016). Automated detection of Chinese government astroturfers using network and social metadata. *Available at SSRN 2738325*.
- Munger, K. (2017). Tweetment effects on the tweeted: Experimentally reducing racist harassment. *Political Behavior, 39*(3), 629-649.

- Nabi, R. L. (2003). Exploring the framing effects of emotion: Do discrete emotions differentially influence information accessibility, information seeking, and policy preference?. *Communication Research*, 30(2), 224-247.
- Nardi, B. A., Schiano, D. J., Gumbrecht, M., & Swartz, L. (2004). Why we blog. *Communications of the ACM*, 47(12), 41-46.
- Nip, J. Y., & Fu, K. W. (2016). Challenging official propaganda? Public opinion leaders on Sina Weibo. *The China Quarterly*, 225, 122-144.
- Öcal, A., Xiao, L., & Park, J. (2021). Reasoning in social media: Insights from Reddit “Change My View” submissions. *Online Information Review*, 1-19.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45(4), 867-872.
- Pan, J., & Xu, Y. (2018). China’s ideological spectrum. *The Journal of Politics*, 80(1), 254-273.
- Pjesivac, I., Geidner, N., & Cameron, J. (2018). Social credibility online: The role of online comments in assessing news article credibility. *Newspaper Research Journal*, 39(1), 18-31.
- Plantin, J. C., & De Seta, G. (2019). WeChat as infrastructure: The techno-nationalist shaping of Chinese digital platforms. *Chinese Journal of Communication*, 12(3), 257-273.
- Prochazka, F., Weber, P., & Schweiger, W. (2018). Effects of civility and reasoning in user comments on perceived journalistic quality. *Journalism Studies*, 19(1), 62-78.



- Qin, B., Strömberg, D., & Wu, Y. (2017). Why does China allow freer social media? Protests versus surveillance and propaganda. *Journal of Economic Perspectives*, 31(1), 117-40.
- Rauchfleisch, A., & Schäfer, M. S. (2015). Multiple public spheres of Weibo: A typology of forms and potentials of online public spheres in China. *Information, Communication & Society*, 18(2), 139-155.
- Repnikova, M., & Fang, K. (2018). Authoritarian participatory persuasion 2.0: Netizens as thought work collaborators in China. *Journal of Contemporary China*, 27(113), 763-779.
- Reuter, O. J., & Szakonyi, D. (2015). Online social media and political awareness in authoritarian regimes. *British Journal of Political Science*, 45(1), 29-51.
- Roberts, M. E. (2014). *Fear, friction, and flooding: Methods of online information control*. Cambridge, MA: Harvard University.
- Roberts, M. E. (2020). Resilience to online censorship. *Annual Review of Political Science*, 23, 401-419.
- Rodriguez, C. G., Moskowitz, J. P., Salem, R. M., & Ditto, P. H. (2017). Partisan selective exposure: The role of party, ideology and ideological extremity over time. *Translational Issues in Psychological Science*, 3(3), 254-271.
- Rosenfeld, B. (2018). The popularity costs of economic crisis under electoral authoritarianism: Evidence from Russia. *American Journal of Political Science*, 62(2), 382-397.
- Rozenas, A., & Stukal, D. (2019). How autocrats manipulate economic news: Evidence from Russia's state-controlled television. *The Journal of Politics*, 81(3), 982-996.
- Rydell, R. J., & McConnell, A. R. (2006). Understanding implicit and explicit attitude change:

- A systems of reasoning analysis. *Journal of Personality and Social Psychology*, 91(6), 995-1008.
- Ryffel, F. A. (2016). The effects of emotional and rational news appeals on political attitudes. *Studies in Communication-Media (SCM)*, 52-73.
- Ryffel, F. A., Wirz, D. S., Kühne, R., & Wirth, W. (2014). How emotional media reports influence attitude formation and change: The interplay of attitude base, attitude certainty, and persuasion. *Media Psychology*, 17(4), 397-419.
- Searles, K., Spencer, S., & Duru, A. (2020). Don't read the comments: The effects of abusive comments on perceptions of women authors' credibility. *Information, Communication & Society*, 23(7), 947-962.
- Shao, P., & Wang, Y. (2017). How does social media change Chinese political culture? The formation of fragmented public sphere. *Telematics and Informatics*, 34(3), 694-704.
- Shirky, C. (2011). The political power of social media: Technology, the public sphere, and political change. *Foreign affairs*, 90(1), 28-41.
- Slothuus, R., & De Vreese, C. H. (2010). Political parties, motivated reasoning, and issue framing effects. *The Journal of Politics*, 72(3), 630-645.
- Song, Y., & Wu, Y. (2018). Tracking the viral spread of incivility on social networking sites: The case of cursing in online discussions of Hong Kong-Mainland China conflict. *Communication and the Public*, 3(1), 46-61.
- Song, Y., Dai, X. Y., & Wang, J. (2016). Not all emotions are created equal: Expressive behavior of the networked public on China's social media site. *Computers in Human Behavior*, 60, 525-533.

- Spohr, D. (2017). Fake news and ideological polarization: Filter bubbles and selective exposure on social media. *Business Information Review*, 34(3), 150-160.
- Stieglitz, S., & Dang-Xuan, L. (2013). Emotions and information diffusion in social media-sentiment of microblogs and sharing behavior. *Journal of Management Information Systems*, 29(4), 217-248.
- Stockmann, D., & Gallagher, M. E. (2011). Remote control: How the media sustain authoritarian rule in China. *Comparative Political Studies*, 44(4), 436-467.
- Stockmann, D., & Luo, T. (2017). Which social media facilitate online public opinion in China?. *Problems of Post-Communism*, 64(3-4), 189-202.
- Stockmann, D., Luo, T., & Shen, M. (2020). Designing authoritarian deliberation: How social media platforms influence political talk in China. *Democratization*, 27(2), 243-264.
- Tai, Y., & Fu, K. W. (2020). Specificity, conflict, and focal point: A systematic investigation into social media censorship in China. *Journal of Communication*, 70(6), 842-867.
- Tang, M., & Huhe, N. (2014). Alternative framing: The effect of the Internet on political support in authoritarian China. *International Political Science Review*, 35(5), 559-576.
- Tong, J. (2015). The formation of an agonistic public sphere: Emotions, the internet and news media in China. *China Information*, 29(3), 333-351.
- Tong, Y., & Lei, S. (2013). War of position and microblogging in China. *Journal of Contemporary China*, 22(80), 292-311.
- Wang, D., & Qian, Y. (2021). Echo chamber effect in rumor rebuttal discussions about COVID-19 in China: Social media content and network analysis study. *Journal of Medical Internet Research*, 23(3), 1-19.

- Wang, W. Y. (2013). Weibo, framing, and media practices in China. *Journal of Chinese Political Science*, 18(4), 375-388.
- Wang, X., & Kobayashi, T. (2021). Nationalism and political system justification in China: Differential effects of traditional and new media. *Chinese Journal of Communication*, 14(2), 139-156.
- Wang, Z., & Tao, Y. (2021). Many nationalisms, one disaster: Categories, attitudes and evolution of Chinese nationalism on social media during the COVID-19 pandemic. *Journal of Chinese Political Science*, 26, 525-548.
- Weeks, B. E., Ardèvol-Abreu, A., & Gil de Zúñiga, H. (2017). Online influence? Social media use, opinion leadership, and political persuasion. *International Journal of Public Opinion Research*, 29(2), 214-239.
- Wirz, D. (2018). Persuasion through emotion? An experimental test of the emotion-eliciting nature of populist communication. *International Journal of Communication*, 12, 1114-1138.
- Witteman, H. O., Fagerlin, A., Exe, N., Trottier, M. E., & Zikmund-Fisher, B. J. (2016). One-sided social media comments influenced opinions and intentions about home birth: An experimental study. *Health Affairs*, 35(4), 726-733.
- Wong, S. H. W., & Liang, J. (2021). Dubious until officially censored: Effects of online censorship exposure on viewers' attitudes in authoritarian regimes. *Journal of Information Technology & Politics*, 18(3), 310-323.
- Wu, J., Li, S., & Wang, H. (2019). From fans to "Little Pink": The production and mobilization mechanism of national identity under new media commercial culture. In L.

- Hailong (Ed.). *From cyber-nationalism to fandom nationalism: The case of Diba expedition in China* (pp. 32-52). London, UK: Routledge.
- Wu, X. (2018). Discursive strategies of resistance on Weibo: A case study of the 2015 Tianjin explosions in China. *Discourse, Context & Media*, 26, 64-73.
- Yang, G. (2009). *The power of the internet in China: Citizen activism online*. Columbia, NY: Columbia University Press.
- Yang, G. (2019). Performing cyber-nationalism in twenty-first-century China: The case of Diba expedition. In L. Hailong (Ed.). *From cyber-nationalism to fandom nationalism: The case of Diba expedition in China* (pp. 1-12). London, UK: Routledge.
- Yang, G., & Calhoun, C. (2007). Media, civil society, and the rise of a green public sphere in China. *China Information*, 21(2), 211-236.
- Yang, H., & Zhao, D. (2015). Performance legitimacy, state autonomy and China's economic miracle. *Journal of Contemporary China*, 24(91), 64-82.
- Yarchi, M., Baden, C., & Kligler-Vilenchik, N. (2020). Political polarization on the digital sphere: A cross-platform, over-time analysis of interactional, positional, and affective polarization on social media. *Political Communication*, 38, 98-139.
- Yardi, S., & Boyd, D. (2010). Dynamic debates: An analysis of group polarization over time on twitter. *Bulletin of Science, Technology & Society*, 30(5), 316-327.
- Zaller, J. R. (1992). *The nature and origins of mass opinion*. Cambridge, UK: Cambridge University Press.
- Zhang, Y., Liu, J., & Wen, J. R. (2018). Nationalism on Weibo: Towards a multifaceted understanding of Chinese nationalism. *The China Quarterly*, 235, 758-783.

Zhu, J., Lu, J., & Shi, T. (2013). When grapevine news meets mass media: Different information sources and popular perceptions of government corruption in mainland China. *Comparative Political Studies*, 46(8), 920-946.

## **Chapter 4: Instructional Manipulation Checks Versus Motivational Messages: Ways to Boost Survey Response Quality**

### **Abstract**

Survey response quality is vital to data quality, and how to increase it remains to be a crucial question in survey-based social science research. In this study, we empirically examine the effectiveness of two prevalent survey quality boosters (instrumental manipulation checks and survey motivational messages) in increasing survey respondents' survey commitment. We find that compared with motivational messages, instrumental manipulation checks are more effective in increasing respondents' time spent on survey questions. We also find that correct answers to instrumental manipulation check questions may predict respondents' willingness of answering more survey questions.

*Keywords:* Survey response quality, respondents' survey commitment, survey boosters, instrumental manipulation checks, survey motivational messages

### **1. Introduction**

The question "How to increase survey response quality?" has been the focus of many survey-based social science studies. Survey completion quality is vital to data quality, and it has direct impacts on empirical results (Galesic & Bosnjak, 2009; Gummer, Roßmann, & Silber, 2021). Scholars have developed several methods to boost survey response quality such as monetary incentives (Szelenyi, Bryant, & Lindholm, 2005) and progress indicator

inclusion (Couper, Traugott, & Lamias, 2001; Matzat, Snijders, & van der Horst, 2009). Recently, two boosters, instrumental manipulation checks (Oppenheimer, Meyvis, & Davidenko, 2009) and motivational messages (Sakshaug & Kreuter, 2014), have become increasingly popular, drawing attention of several scholars.

Instrumental manipulation checks refer to trick questions included in a survey that seemingly ask the respondents to provide their own answers but furtively instruct them to give an assigned answer to the question. Only when the respondents read the question text carefully can they follow the instruction accurately, providing the assigned answer rather than their own answer (Paas & Morren, 2018). By contrast, motivational messages improve survey quality by displaying textual messages to survey respondents that remind them how important their survey participation is for the research and how great their contribution to science can be if they answer the survey questions carefully and seriously (Bayram, 2018).

Although the strengths and limitations of instrumental manipulation checks and survey motivational messages in survey quality improvement have been investigated, to our knowledge, no systematic comparison of their effectiveness has been reported thus far. In this study, we empirically examine the effects of the two boosters on respondents' commitment to a survey by using an online survey experiment. Specifically, we examine their commitment using three measurements: (1) survey respondents' time spent on experimental questions, (2) their willingness of cooperation, and (3) their answers variability of grid-design questions.



In our experiment, the respondents were first exposed to different boosters. After their exposure, to obtain the first measurement, we recorded how many seconds they spent on two sets of the experimental questions. Then, to obtain the second measurement, we used a question that asked the respondents to indicate how many more questions they were willing to answer if they were given a choice. Finally, we obtained the third measurement by examining whether the respondents' answers to our two grid-design questions had sufficient variation.

We find that compared with motivational messages, instrumental manipulation checks were more effective in increasing respondents' time spent on survey questions. However, neither of them effectively increased survey respondents' willingness of cooperation or their answers variability of grid-design questions. We also find that respondents' correct answers to instrumental manipulation checks may be a potential predictor for willingness of cooperation among the respondents.

## **2. Literature Review**

Early survey methodology research has examined several incentives and techniques that may aid researchers in improving survey response quality and reducing the survey breakoff (Couper, Traugott, & Lamias, 2001; Heerwegh & Loosveldt, 2006); these incentives and techniques include monetary incentives (Gritz, 2004; Szelenyi, Bryant, & Lindholm, 2005), progress indicator inclusion (Matzat, Snijders, & van der Horst, 2009; Villar, Callegaro, & Yang, 2013), and survey question placement (Bradburn & Mason, 1964; Kraut, Wolfson, &

Rothenberg, 1975; Helsing & Comstock, 1976; McFarland, 1981; Teclaw, Price, & Osatuke, 2012). The findings of these studies suggest that material incentives can increase the survey response rate, that progress indicator inclusion can reduce the survey breakoff, and that questions at the beginning of a questionnaire are more appropriately answered than those placed at its end. In addition, question comprehensibility and cognitive effort required by the survey determine the overall survey completion quality (Schuman & Presser, 1996; Lenzner, 2012; Ganassali, 2008). Specifically, questions written more concisely and in an understandable manner require less cognitive effort and thus may receive more attention from survey respondents. Healey (2007) also finds that the answer option format, such as the dropdown format, affects response quality indirectly. Finally, the number of survey questions and the survey length are also crucial factors affecting response quality (Smith, Olah, Hansen, & Cumbo, 2003; Peytchev, 2009; Galesic & Bosnjak, 2009; Rolstad, Adler, & Rydén, 2011; Sahlqvist et al., 2011); shorter questionnaires with fewer questions tend to receive more valid responses and lead to fewer dropouts.

Despite abundant literature being reported on survey quality, the reported findings have been inconsistent because of variations in the characteristics and types of the included surveys. Comparing surveys applied to different types of populations with different purposes is even more difficult. In the era of the Internet, the differences between offline and online surveys have reduced the applicability of the findings reported previously (Clifford, Jewell, & Waggoner, 2015; Li, Shi, & Zhu, 2017). Consequently, newer survey quality boosters that can be commonly applied to different types of questionnaires need to be reviewed. One of these

boosters is instrumental manipulation checks (also called “screeners”), a technique to check if respondents are paying enough attention to the survey and thereby boost the survey response quality (Oppenheimer, Meyvis, & Davidenko, 2009; Meade & Craig, 2012; Hauser, Ellsworth, & Gonzalez, 2018).

Although such instrumental manipulation checks have been shown to effectively improve survey response quality (Berinsky, Margolis, & Sances, 2014; Chmielewski & Kucker, 2020; Ladini, 2021), some researchers believe that they may impair the rapport built between survey participants and administrators; this is because the participants may note that they are being monitored or tricked and thereby answer the questions in a socially desirable manner (Hauser & Schwarz, 2015; Abbey & Meloy, 2017; Kane & Barabas, 2019). In addition, such trap questions can be considered as an intervention to survey respondents because it provides an irrelevant component to the survey questions (Hauser & Ellsworth, 2018). Finally, simply excluding responses that fail the instrumental manipulation checks may result in a large loss of quality responses because momentary inattention and carelessness do not necessarily imply poor quality answers throughout the whole survey (Berinsky, Margolis, & Sances, 2014; Abbey & Meloy, 2017; Kotzian, Stoeber, Hoos, & Weissenberger, 2020).

Some social scientists have considered other measures such as motivational messages (Aust, Diedenhofen, Ullrich, & Musch, 2013; Sakshaug & Kreuter, 2014; Revilla, 2016; Bayram, 2018; Chan et al., 2018; Verbree, Toepoel, & Perada, 2020) to guarantee survey

response quality. By displaying textual messages informing the participants how important their responses are for social science research, this method encourages participants to take the survey more seriously so as to reduce survey breakoff (Sakshaug & Crawford, 2010; Chan et al., 2018). A study reports that a survey recruitment message with altruistic appeals increases the recruitment rates and promotes higher survey participation rates (Martinsson, Dumitrescu, & Riedel, 2017). To increase respondents' survey engagement, some scholars have used messages to remind survey participants that their survey responses will not be used if they do not pay sufficient attention to the survey (Tourangeau & Ye, 2009; Clifford & Jerit, 2015). However, survey messages may also induce social desirability bias because they may put pressure on the respondents, making them feel that they are somehow being monitored (Clifford & Jerit, 2015).

Although each booster has its own advantages and limitations, a horse race between the two boosters is needed so as to better instruct and guide future survey-based research. In this study, we determine the effectiveness of the two boosters on respondent survey commitment by using an online survey experiment. Our hypotheses of the effectiveness of these two boosters are described in the subsequent section.

### **3. Hypotheses**

#### *3.1 Effects of Instrumental Manipulation Checks and Survey Motivational Messages on Survey Commitment*

Instrumental manipulation checks—or screeners or trap questions—are designed to measure

survey respondents' attentiveness during survey completion (Oppenheimer, Meyvis, & Davidenko, 2009; Berinsky, Margolis, & Sances, 2014). However, some scholars have noted that instrumental manipulation checks serve as not only a mere measurement of respondents' attentiveness but also an intervention (Hauser & Schwarz, 2015; Hauser & Ellsworth, 2018). In particular, Hauser and Schwarz (2015) find that instrumental manipulation checks can improve respondents' survey completion performance by prompting respondents to rethink their spontaneous answers to tricky questions. Exposure to instrumental manipulation checks increases respondents' systematic thinking and makes them adopt more strategic reasoning when answering tricky questions. Some studies have found that this booster is even more effective when being used in samples recruited through Internet panels (Hauser & Schwarz, 2016; Paas, Dolnicar, & Karlsson, 2018; Ladini, 2021).

Including motivational messages in a survey is another common technique suggested by social scientists for encouraging survey participation and reducing survey dropouts (Reips, 2000, 2002a, 2002b; Sakshaug & Crawford, 2010; Bayram, 2018). Motivational messages include messages that thank the survey respondents for participation, that tell them how great of a contribution they have made to social science studies, and that remind them about how the data quality of the study depends on their meticulous, serious answers to the survey questions. Several studies have demonstrated the effectiveness of such boosters. For instance, Aust, Diedenhofen, Ullrich and Musch (2013) find that respondents exposed to seriousness reminders answer attitudinal questions more consistently; Bayram (2018) indicates that reminding college students that their serious participation will provide quality data to science

increases the students' survey experiment engagement; and Verbree, Toepoel and Perada (2020) report that respondents' awareness of seriousness is a predictor of data quality.

In this study, we extend the previous arguments regarding instrumental manipulation checks and motivational messages and hypothesize that compared with that of motivational messages, inclusion of multiple instrumental manipulation checks is more effective in boosting respondents' survey commitment because the checks are more engaging than the (merely textual) messages. As suggested by Berinsky, Margolis and Sances (2014), a single instrumental manipulation check can measure respondents' attentiveness only at one time point; it does not necessarily reflect their overall attentiveness. Similarly, when there is only one instrumental manipulation check and survey participants fail to notice it, they may not have another chance to learn that their attentiveness is being monitored. By contrast, when they are repeatedly exposed to multiple checks, they may become aware of there being more than one trap question in the survey. This awareness may encourage them to be more careful about subsequent survey questions and avoid answering any of the instrumental manipulation checks incorrectly. This process eventually increases the respondents' attention toward survey questions and makes them more committed to the survey.

Motivational messages may easily be neglected by survey participants, or the participants may not feel too concerned about them. Individuals' very act of deciding to participate in a survey suggests that they are already willing to spend their time to help and expect that their answers will to some extent contribute to the research. Reiterating the importance and

seriousness of their participation with standard wordings may thus be redundant, and such messaging may be ignored by the respondents. In addition, some studies have suggested limited effects of motivational messages on survey response quality (Revilla, 2016) in terms of reducing the survey breakoff or increasing respondents' time spent on survey completion (Sakshaug & Crawford, 2010). Therefore, we hypothesize that compared with survey motivational messages, instrumental manipulation checks are more effective in boosting respondents' commitment to a survey. This hypothesis has three parts:

Hypothesis 1a: *Compared with survey motivational messages, instrumental manipulation checks more effectively increase respondents' time spent on survey questions.*

Hypothesis 1b: *Compared with survey motivational messages, instrumental manipulation checks more effectively increase respondents' willingness of cooperation.*

Hypothesis 1c: *Compared with survey motivational messages, instrumental manipulation checks more effectively increase respondents' answers variability of grid-design questions.*

### *3.2 Effects of Instrumental Manipulation Check Passage on Survey Commitment*

In Hypothesis 1a–1c, we assume that multiple instrumental manipulation checks at one time point may alert survey participants about the several trap questions within the survey, and this

reminder may increase respondents' attentiveness toward subsequent survey questions. We believe that participants with the knowledge of the existence of multiple instrumental manipulation checks will attempt to avoid missing information in the subsequent parts of the survey. Their endeavor will then boost them to be more willing to cooperate in answering the survey.

One method to detect whether respondents have effectively noted the existence of multiple instrumental manipulation check questions is to review their passage of the relevant questions—that is, to check how many of the relevant questions have been answered correctly. We assume that if a respondent can detect the existence of instrumental manipulation checks and answer them correctly, they may be relatively more committed to the survey. Therefore, we propose the following hypotheses:

Hypothesis 2a: *Passage of instrumental manipulation checks is positively associated with respondents' time spent on survey questions.*

Hypothesis 2b: *Passage of instrumental manipulation checks is positively associated with respondents' willingness of cooperation.*

Hypothesis 2c: *Passage of instrumental manipulation checks is positively associated with respondents' answers variability of grid-design questions.*



#### **4. Outcome Variables of Interest**

To examine the exposure effects of the two boosters on respondents' survey commitment, we used three measurements as three outcome variables of interest: (1) time spent on experimental questions, (2) willingness of cooperation, and (3) answers variability of grid-design questions.

##### *4.1 Time Spent on Experimental Questions*

The first outcome variable of interest is the time that respondents spent on each of the two sets of experimental questions after they were exposed to different boosters. The two sets of experimental questions included a total of 21 questions—with 14 in the first set and 7 in the second; these questions explored several factors related to the respondents including their social media usage habits, attitudes toward online opinions, and general attitudes toward society and policies. Here, their answers to these questions were not of our interest. We only recorded the time (in seconds) they spent on viewing and answering the questions. The number of seconds they spent on each of the two sets constituted our first measurement.

##### *4.2 Willingness of Cooperation*

The second measurement was respondents' willingness to cooperate in the survey. After the respondents were exposed to different boosters in the previous question sets, we informed them that we would be showing them at most five short news pieces and ask them some relevant questions (each news piece had one corresponding question). They could then choose how many questions they would like to answer. The willingness-to-cooperate question

was as follows:

*We are going to show you at most five short pieces of news and ask you some questions to learn your attitudes toward the news. We understand that this will take up more of your time, so you can choose how many questions you want to answer based on your personal willingness. Of course, these questions will be very helpful for our research. Hope that you can try to answer more questions. Thank you!*

The respondents could then choose to answer 0, at least 1, or at most 5 questions. The number of questions they chose to answer was our second measurement (Bayram, 2018).

#### *4.3 Answers Variability of Grid-design Questions*

Our final measurement is respondents' answers variability of two grid-design questions. We used this as one of the measurements because answers variability of grid-design questions could indicate if the respondents answered the survey questions in a hurry or carefully—thus indicating respondents' survey commitment (Galesic & Bosnjak, 2009). This method assumes that impatient or careless respondents tend to select the same answer options for a grid-design question (e.g., all of their answers are *strongly agree*, *strongly disagree*, or *don't know*). Therefore, for impatient respondents, the answers variability of grid-design questions will be low.

Here, we included two grid-design questions. The first one asked the respondents to

evaluate the level of importance of seven aspects in their life: family, friends, leisure, work, exercise, study, and financial income. It had five possible responses, ranging from *Most important* to *Least important*. The second question asked the respondents to indicate their frequency of use for six devices or media outlets to acquire information: cell phone, computer, television, magazine, book, and radio. It had four possible responses, ranging from *Often* to *Almost never*. For each question, we assigned a value to each option and calculated the variance of the obtained values; the larger the value, the more committed the survey respondents were, whereas the less the value, the less committed the survey respondents were.

## **5. Experimental Design**

To test our hypotheses, we adopted an online survey experiment. We commissioned a well-established survey company (KurunData.com) in mainland China to issue the survey on its online panel. The sample was recruited through quota sampling, with the quota determined according to the demographic distribution (including gender, age, and province) of the Chinese population. We excluded responses from individuals who completed the survey less than 1 minute as well as those who had repeated IP addresses. Consequently, we included 1293 valid responses.

The respondents were first asked to answer a set of questions related to their demographics and social media usage habits. For all the respondents, we included one instrumental manipulation check question at the end of demographics-related questions as a

pre-treatment attentiveness measure. This question asked the respondents how many Shanghai international marathon championships they had won. The expected answer was “none” because the chance of our sample containing several Shanghai international marathon championship winners was very low. Thus, if a respondent read and answered the survey questions carefully, they were highly unlikely to choose any option other than “none” (the other options were one time, two times, three times, and four times). Our results indicated that among the 1293 respondents, 1132 answered this question correctly. Nevertheless, we did not exclude the respondents who failed this check. We coded respondents’ answers to this question using a binary variables: 1 if the answer was “none” or 0 otherwise.

The respondents were then randomly assigned to one of the following four groups: control group, instrumental manipulation checks group, motivational messages group, and combination group (exposure to both instrumental manipulation checks and motivational messages). Each of these group was displayed with different content types. Figure 1 shows the overall survey flow.

### *5.1 Control Group*

The control group respondent were shown this message:

*Thank you for your answers so far. Please click “Next page” to enter the next survey section.*

After they clicked the “Next page” button, the respondents were asked to start answering the first set of experimental questions, with 14 questions. After they finished answering the 14 questions, the aforementioned message was shown again. After they clicked the “Next page” button again, the respondents were shown the willingness-to-cooperate question—where they could indicate how many questions they would like to answer next, and the response of this question ranged from 0 to 5.

After they completed this part, the respondents were asked to start the second set of experimental questions, consisting of 7 questions. Finally, they were asked to answer the two grid-design questions, placed at the very end of the survey.

### *5.2 Instrumental Manipulation Checks Group*

The instrumental manipulation checks group respondents were shown two instrumental manipulation check questions (see Appendix 4 for exact phrasing of the questions).

The first question, placed at the beginning of the first experimental question set, appeared to ask the respondents to indicate which websites they used often, but the question text had already instructed the respondents to choose three predetermined websites as the correct answers. If respondents read the question text carefully, they were able to follow the instruction and choose the correct answers. Then, similar to that for the control group, these respondents were asked to answer the first set of questions once they had finished answering the instrumental manipulation check question.

After they completed the first set, the respondents were shown another instrumental manipulation check question. This question appeared to ask the respondents to indicate which colors they liked the most, but the question text had already instructed the respondents to choose two predetermined colors.

Thereafter, they were asked to answer the willingness-to-cooperate question, followed by the second set of experimental questions and the grid-design questions.

### *5.3 Motivational Messages Group*

The motivational messages group respondents were shown a message different from that shown to the control group respondents; it was as follows:

*You have completed most of our questions, and we thank you very much for your answers so far! Your answers will be of great value and help to social science research.*

*Survey quality highly depends on whether you have carefully read and answered every single question. Hence, we sincerely hope that you will read and answer the remaining questions carefully.*

Below the message, they were shown an option saying, “Ok, I will answer carefully!” Only when the respondents selected this option were they be able to click the “Next page”

button and proceed to the next page. This option aimed to reinforce their awareness of the message. They then began to answer the first set of experimental questions. The same message was shown again right after the respondents finished answering the first set of experimental questions. Thereafter, they were asked to answer the willingness-to-cooperate question, followed by the second set of experimental questions and the grid-design questions.

#### *5.4 Combination Group*

The combination group respondents were shown both the instrumental manipulation check questions and motivational messages. However, the display order of the two components were randomized, and only one component was displayed per page to minimize the order effects. In other words, a respondent could see either the instrumental manipulation check question first and then the motivational message or vice versa.

The reason underlying the inclusion of this group is to examine the collective effects of the two boosters. However, if the display order of these two boosters were fixed, the more influential booster would have consistently outperformed the other booster—skewing the results for the effects of the boosters; in that case, we would not be able to determine which booster is more effective and whether both the boosters have a synergistic effect.

## **6. Specifications and Results**

Table 1 shows the statistical profile of respondents in four groups. To test Hypotheses 1a–1c, we considered three outcome variables. The first outcome variable is respondents' time spent

on the two sets of experimental questions (Galesic & Bosnjak, 2009; Read, Wolters, & Berinsky, 2021). To examine this variable, we converted our dataset to panel data and used the random-effects regression model for analysis. We used this model because our respondents viewed a total of 21 experimental questions—14 in the first set and 7 in the second. We assumed that each time a respondent answered one experimental question, his/her patience and commitment to the next survey question was affected by that particular question as well as previous questions. To minimize the survey length effects, we controlled for respondents' every exposure to each question. We regarded their exposure order to a total of 21 questions as a time series variable and the order ranged from exposure 1 to 21. The following main random-effects regression specification is thus considered:

$$Y_{it} = \alpha_i + D_i' \beta_1 + \beta_2 N_t + X_i' \beta_3 + \gamma_{it} \quad (1)$$

where  $Y_i$  denotes respondent  $i$ 's time spent on 21 experimental questions,  $\beta_1$  is the vector of coefficients on the dummies of one control group along with three treatment groups  $D_i$ ,  $\beta_2$  is the coefficient on  $i$ 's viewing order of 21 experimental questions ( $t = 1, 2, \dots, 21$ ),  $\beta_3$  is the vector of coefficients on individual-level control variables  $X_i$ ,  $\alpha_i$  is the constant and  $\gamma_i$  is the error term clustered at the individual level and assumed to be independent and identically distributed.

The second and third outcome variables are the number of questions the respondents wanted to view for the willingness-to-cooperate question and the respondents' answers variability of the two grid-design questions (Galesic & Bosnjak, 2009; Bayram, 2018). For



these two variables, we employed OLS regression models for analysis, with the following main specifications:

$$Z_i = \delta_i + D_i' \varepsilon_1 + X_i' \varepsilon_2 + \epsilon_i \quad (2)$$

$$H_i = \theta_i + D_i' \vartheta_1 + X_i' \vartheta_2 + \mu_i \quad (3)$$

where  $Z_i$  denotes the number of questions respondent  $i$  chose to view ( $Z = 0, 1, 2, \dots, 5$ ) and  $H_i$  denotes respondent  $i$ 's answers variability of the grid-design questions,  $\varepsilon_1$  and  $\vartheta_1$  denote a series of coefficients on one control group dummy along with three treatment groups dummies  $D_i$ ,  $\varepsilon_2$  and  $\vartheta_2$  denote a series of coefficients on individual-level control variables,  $\delta_i$  and  $\theta_i$  are the constants, and  $\epsilon_i$  and  $\mu_i$  are the error terms clustered at the individual levels and assumed to be independent and identically distributed.

### *6.1 Time Spent on Experimental Questions*

The regression results of Equation 1 are illustrated as error bars in Figure 2. The results indicate that although the coefficient on the control group is nonsignificant compared with the other three groups, the coefficient on the instrumental manipulation checks group is significantly positive compared with the combination and motivational messages groups. By contrast, the coefficient on the motivational messages group is significantly negative compared with the instrumental manipulation checks group. Finally, the coefficient on the combination group is also significantly negative compared with the instrumental manipulation checks group.

The error bars thus indicate that although the relationships between the control group and each of the three treatment groups is nonsignificant, within the three treatment groups, respondents exposed to instrumental manipulation checks were more likely to spend more time on the experimental questions than respondents who were exposed to motivational messages. Figure 3 plots the marginal effects of these two boosters over time. The results indicate that over time, all the instrumental manipulation check and motivational group respondents tended to spend more time on the experimental questions. However, the instrumental manipulation checks group respondents significantly outperformed their counterparts in the motivational messages group.

The statistical results of the random-effects regression are presented in Table 2. The results indicate that across the five specifications, the coefficients on the time variable  $N_t$  are all significantly positive, suggesting that as respondents kept viewing the experimental questions, their time spent on the questions increased. The survey question placement effects as well as survey length effects were not significantly observed in our sample when respondents viewed and answered the experimental questions (Kraut, Wolfson, & Rothenberg, 1975; Helsing & Comstock, 1976; Teclaw, Price, & Osatuke, 2012; Smith, Olah, Hansen, & Cumbo, 2003; Galesic & Bosnjak, 2009; Sahlqvist et al., 2011). The reason underlying this may be as follows: when a set contains questions placed tightly together, survey participants do not necessarily spend less time on these questions as they continue viewing them.

Several coefficients on the control variables are also notable. Respondents who tended to

spend more time answering demographics-related questions were more likely to spend more time on the experimental questions. This is likely due to respondents' inherent personalities: they are relatively more patient and attentive (Paas, Dolnicar, & Karlsson, 2018). Moreover, older respondents tended spend more time on the questions—consistent with previous literature, suggesting that on average, older people may answer survey questions slower due to their decreasing cognitive ability (Knauper, 1999; Schwarz, 1999; Yan & Tourangeau, 2008; Knäuper et al., 2016).

Finally, we included the passage of pretreatment instrumental manipulation check as a control variable in our model. As shown in Table 2, the coefficient of this variable is nonsignificant—consistent with the previous finding that correct answer to one instrumental manipulation check question does not effectively indicate sustained attentiveness toward a survey (Berinsky, Margolis, & Sances, 2014).

## *6.2 Willingness of Cooperation*

Table 3 reports the regression results of the number of questions that respondents were willing to view for the willingness-to-cooperate question (Equation 2). None of the coefficients are significant, suggesting that mere exposure to different survey quality boosters does not fully explain the respondents' willingness to view more questions. However, some demographic factors may predict this outcome variable. Here, the respondents with high income were less willing to cooperate in the survey, whereas those with high parental income were more willing. A possible explanation for this result is as follows: the respondents with

high income have a busy schedule and thus have less time and patience to cooperate, whereas those with high parental income are less concerned about their financial burden and thus have more time and patience to cooperate. We also find that respondents who were more interested in political affairs were more likely to cooperate. Because most of our experimental questions are related to social issues, this positive association is expected.

### *6.3 Answers Variability of Grid-design Questions*

Our final outcome variable of interest is answers variability of grid-design questions. Tables 4-1 and 4-2 report the relevant results (Equation 3). The results indicate no significant relationship between any of the survey boosters and the respondents' answers variability of grid-design questions. The coefficient on income in both the tables is significantly negative, suggesting that people with higher income provided more invariable answers to the grid-design questions. The coefficient on the variable of age in Table 4-2 is significantly negative, suggesting that for the second grid-design question, younger respondents were more likely to choose similar answers with less variability. Taken together, along with our findings from the random-effects model, we find that age is a crucial factor for predicting individuals' survey commitment; this finding corroborates previous literature as discussed in the literature review section. In addition, married respondents tended to provide less varied answers to the grid-design questions. This is possibly because married individuals may want to spend more time with their family and thus have less patience to answer the questions than nonmarried individuals.

In conclusion, based on random-effects regression results for three outcome variables, we could only confirm Hypothesis 1a: instrumental manipulation checks are more effective in boosting survey respondents' survey commitment in terms of time spent on the survey questions. However, we also find that the respondents' willingness of cooperation and answers variability of grid-design questions could not attest to the effects of either instrumental manipulation checks or motivational messages. Thus, Hypotheses 1b and 1c are rejected.

#### *6.4 Effects of Instrumental Manipulation Checks Passage on Survey Commitment*

To test Hypotheses 2a–2c, we exclusively selected the respondents from the two groups containing respondents exposed to instrumental manipulation checks—the instrumental manipulation checks group ( $n = 305$ ) and the combination group ( $n = 322$ )—and examined whether their instrumental manipulation checks passage rate affected their survey commitment thereafter. For this part of the analysis, we also considered their answer to the pretreatment instrumental manipulation check question. All the respondents were divided into eight groups based on their different passage rates of the instrumental manipulation check questions (Table 5-1). For instance, group 1 comprised the respondents who answered all three instrumental manipulation check questions correctly, groups 2–7 contained the respondents who answered one or two of the three questions correctly, and group 8 included the respondents answered all the questions incorrectly.

Here, we applied the specifications in Equations 1–3 as well, with  $\beta_1$ ,  $\varepsilon_1$ , and  $\vartheta_1$  as

coefficients on the dummies of the eight groups. We used group 8 (the all-incorrect group) as the baseline group for comparison. As shown in Table 5-2, the coefficients on all the remaining groups are nonsignificant, and therefore, the passage of instrumental manipulation checks did not affect respondents' time spent on the experimental questions. Thus, our Hypothesis 2a is rejected.

As shown in Table 5-3, the passage rate has significant effects on the respondents' willingness of cooperation. Specification 1 is used to indicate the results of respondents who were only exposed to instrumental manipulation checks ( $N = 305$ ). When group 8 is used as the baseline group, groups 1, 4, and 5 are significantly more willing to answer more questions for the willingness-to-cooperate question. For a complete comparison, we next included the respondents exposed to both motivational messages and instrumental manipulation checks for analysis ( $N = 305 + 322$ ), and the results are shown in specification 2. The results indicate that even after the groups are combined, the results remain consistent. Although the coefficient on group 3 is significant in specification 2, this group has only one observation. Therefore, we excluded group 3 from our analysis. Finally, the coefficient on group 7 in specification 2 is found to be significantly positive as well.

As indicated in Table 5-1, groups 1 and 4 included the respondents who answered both the treatment instrumental manipulation check questions correctly, whereas groups 5 and 7 comprised respondents who answered only the second treatment instrumental manipulation check question correctly. The common feature of these four groups is that they included

respondents who had passed at least the second treatment instrumental manipulation check question. Because the willingness-to-cooperate question was placed right after the second treatment instrumental manipulation check, the significantly positive coefficients on these four groups may have been the result of the passage of the second treatment instrumental manipulation check. In other words, correctly answering instrumental manipulation check questions may have led to more willingness to continue viewing follow-up questions in the survey. This result also suggests that instrumental manipulation check itself may be a potential survey quality booster—consistent with our Hypothesis 2b.

Finally, as shown in Table 5-4, the relationship between instrumental manipulation checks passage and answers variability of grid-design questions is nonsignificant. Although the coefficient on group 3 is significant, group 3 only contains one observation—insufficient to draw a concrete conclusion. Therefore, Hypothesis 2c could not be accepted.

**Fig 1: Survey Flow**

<b>Control Group</b>	<b>Instrumental Manipulation Checks Group</b>	<b>Motivational Messages Group</b>	<b>Combination Group</b>
Demographic Questions (14 Questions)			
First display of control message	First display of instrumental manipulation check question (website)	First display of motivational message	First display of instrumental manipulation check question (website) and motivational message - Random order
First set of experimental questions (14 Questions)			
Second display of control message	Second display of instrumental manipulation check question (color)	Second display of motivational message	Second display of instrumental manipulation check question (color) and motivational message - Random order
Willingness-to-cooperate question			
Second set of experimental questions (7 questions)			
Grid-design questions (2 questions)			



**TABLE 1: Statistical Profile of Respondents in Four Experimental Groups**

	<b>Control Group</b>					<b>Combination Group</b>				
	Obs.	Mean	Std. Dev.	Min	Max	Obs.	Mean	Std. Dev.	Min	Max
Male	319	0.498	0.501	0	1	322	0.441	0.497	0	1
Age	319	38.266	10.658	18	72	322	36.882	10.767	18	84
CCP membership	319	0.254	0.436	0	1	322	0.307	0.462	0	1
Marital status	319	0.790	0.408	0	1	322	0.770	0.421	0	1
Education level	319	5.649	0.905	1	8	322	5.720	0.810	3	8
Parental education level	319	4.013	1.322	1	8	322	4.140	1.397	1	8
Urban status	319	0.843	0.364	0	1	322	0.826	0.380	0	1
Income	319	3.696	1.689	1	9	322	3.773	1.809	1	9
Family income	319	5.003	1.769	1	9	322	5.106	1.947	1	9
Political interest	319	3.404	0.646	1	4	322	3.394	0.614	1	4
Frequent use of Weibo	319	3.661	1.523	1	5	322	3.758	1.511	1	5
Frequent use of Wechat	319	4.900	0.472	1	5	322	4.879	0.487	1	5
Frequent use of Internet forum	319	3.270	1.297	1	5	322	3.494	1.241	1	5
Frequent use of other social media	319	3.423	1.303	1	5	322	3.593	1.258	1	5
Most recent news consumption through Weibo	319	4.759	1.743	1	6	322	4.820	1.713	1	6
Most recent news consumption through Wechat	319	5.683	0.818	1	6	322	5.739	0.724	1	6
Most recent news consumption through Internet forum	319	4.586	1.551	1	6	322	4.761	1.393	1	6
Most recent news consumption through other social media	319	4.677	1.523	1	6	322	4.807	1.416	1	6

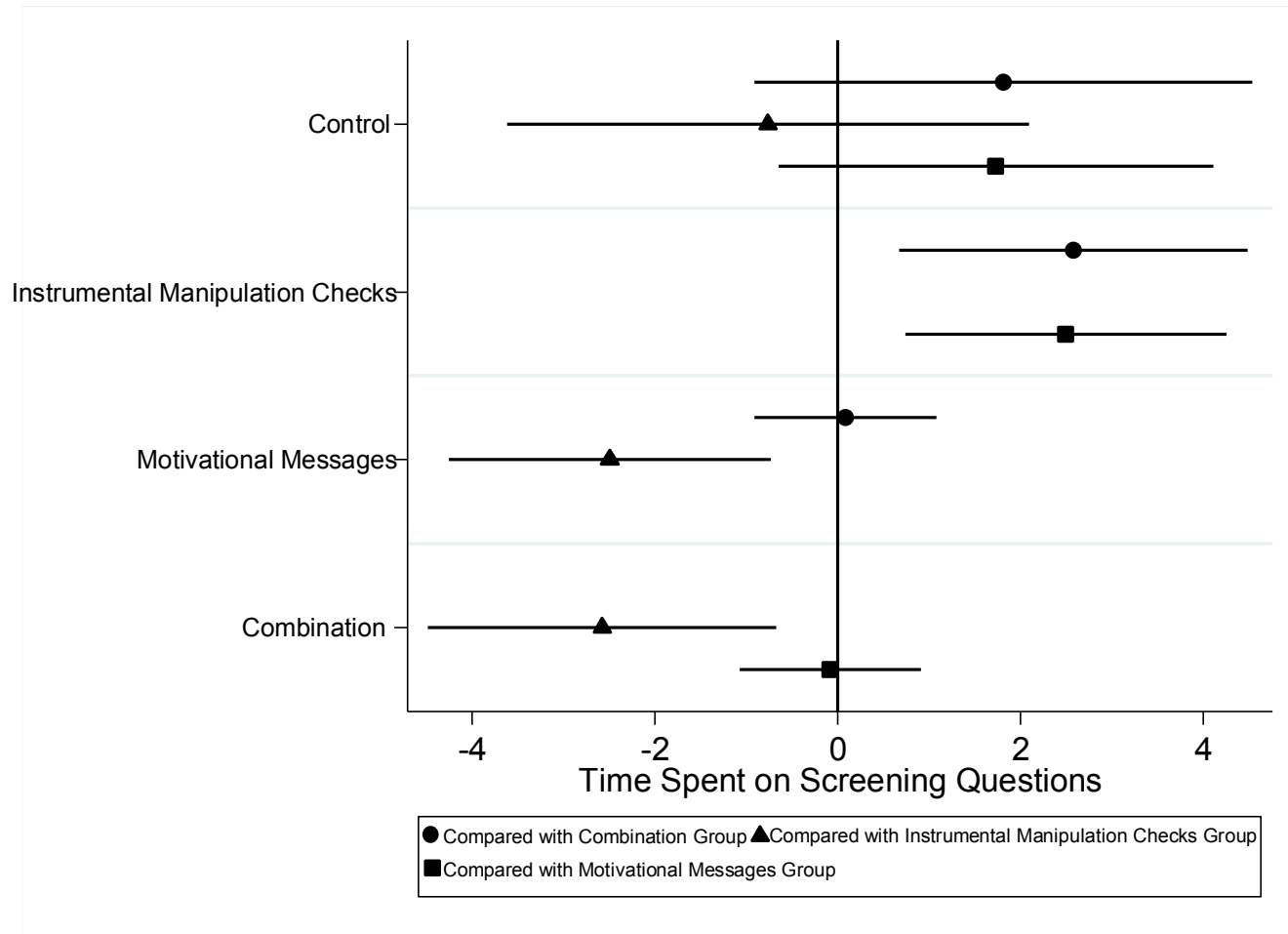
  

	<b>Instrumental Manipulation Checks Group</b>					<b>Motivational Messages Group</b>				
	Obs.	Mean	Std. Dev.	Min	Max	Obs.	Mean	Std. Dev.	Min	Max
Male	305	0.452	0.499	0	1	347	0.444	0.498	0	1
Age	305	36.993	10.602	18	78	347	36.599	9.836	18	68
CCP membership	305	0.275	0.447	0	1	347	0.251	0.434	0	1
Marital status	305	0.780	0.415	0	1	347	0.758	0.429	0	1
Education level	305	5.731	0.790	2	8	347	5.599	0.946	1	8
Parental education level	305	4.115	1.415	1	8	347	4.075	1.435	1	8
Urban status	305	0.823	0.382	0	1	347	0.787	0.410	0	1
Income	305	3.590	1.741	1	9	347	3.651	1.793	1	9

Family income	305	5.056	1.892	1	9	347	4.908	1.905	1	9
Political interest	305	3.384	0.654	1	4	347	3.366	0.655	1	4
Frequent use of Weibo	305	3.862	1.440	1	5	347	3.697	1.520	1	5
Frequent use of Wechat	305	4.921	0.445	1	5	347	4.905	0.416	1	5
Frequent use of Internet forum	305	3.531	1.217	1	5	347	3.389	1.297	1	5
Frequent use of other social media	305	3.584	1.254	1	5	347	3.545	1.240	1	5
Most recent news consumption through Weibo	305	4.997	1.625	1	6	347	4.810	1.701	1	6
Most recent news consumption through Wechat	305	5.675	0.894	1	6	347	5.697	0.792	1	6
Most recent news consumption through Internet forum	305	4.764	1.425	1	6	347	4.628	1.499	1	6
Most recent news consumption through other social media	305	4.780	1.567	1	6	347	4.697	1.483	1	6

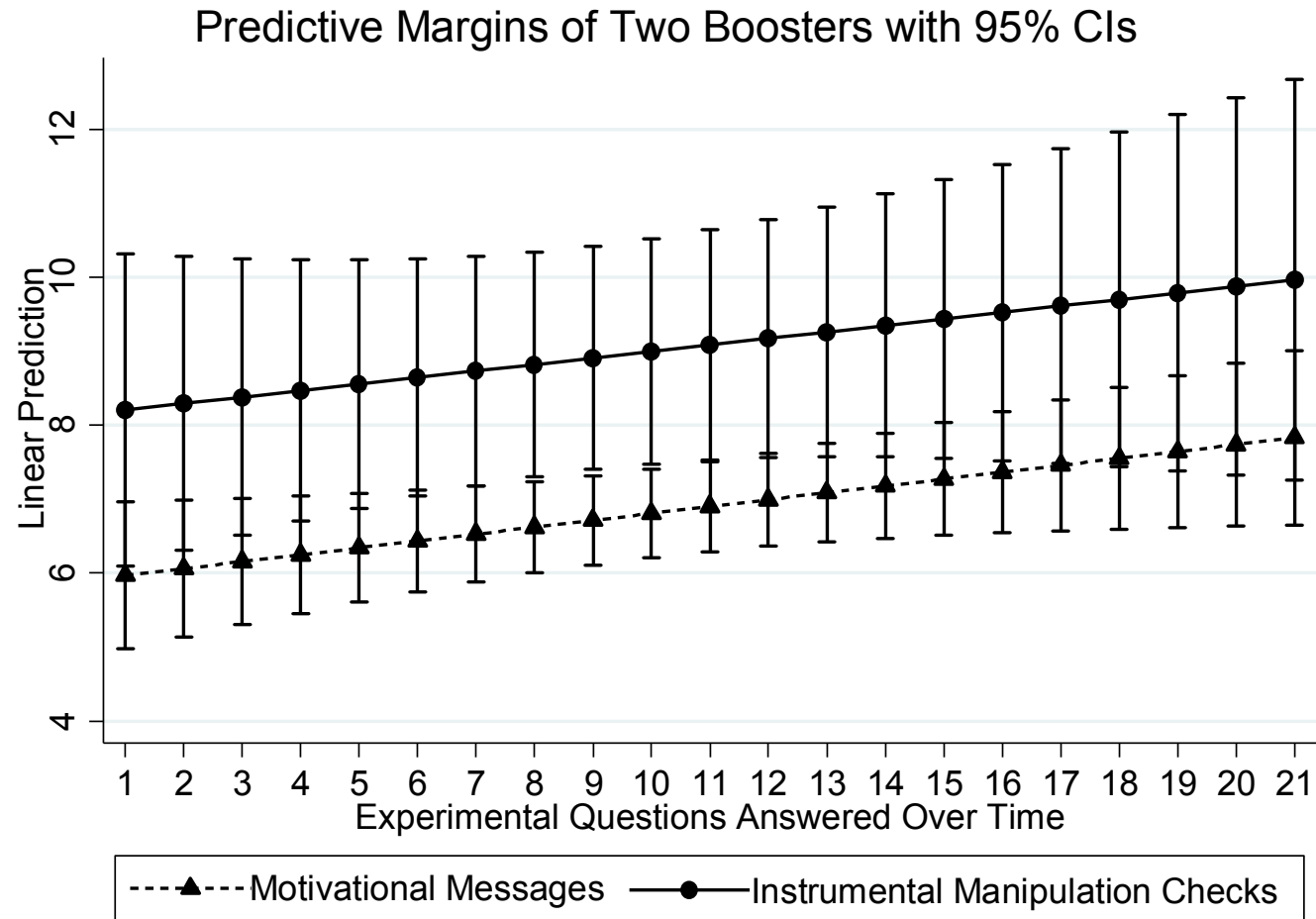
*Notes:* *Male* is equal to 1 if the respondent is male or to 0 if the respondent is female. *CCP member* is equal to 1 if the respondent is a member of Chinese Communist Party or to 0 otherwise. *Marital status* is equal to 1 if the respondent is married or to 0 otherwise. *Urban status* is equal to 1 if the respondent has an urban residence or to 0 otherwise. *Education* and *parental education* are measured on an 8-point scale—from 1 (*below primary school*) to 8 (*doctoral*). *Income* and *family income levels* are measured on a 9-point scale—from 1 (<RMB20,000) to 9 (>RMB1,000,000). *Political interest* is measured on a 4-point scale—from 1 (*not interested at all*) to 4 (*very interested*). *Frequent use of Weibo, Wechat, Internet forums, and other social media platforms* are measured on a 5-point scale—from 1 (*almost never*) to 5 (*almost everyday*). *Most recent news consumption through Weibo, Wechat, Internet forum, and other social media* are measured on a 6-point scale—from 1 (*never*) to 6 (*sometime today*). For the exact phrasing of the questions, see Appendix 4.

**Fig 2. Random-Effects Regression of Time Spent on Experimental Questions**



*Notes:* Each line shows the error bar of the coefficient on each group from random-effects regressions where the dependent variable is respondents' time spent (in seconds) on experimental questions.

**Fig 3. Marginal Effects of Time Spent (in Seconds) on Experimental Questions Over Time Between the Instrumental Manipulation Checks and Motivational Messages groups**



**TABLE 2: Random-Effects Regression of Time Spent on Experimental Questions**

	(1)	(2)	(3)	(4)
Control group		1.813 (1.388)	-0.763 (1.459)	1.732 (1.216)
Combination group	-1.813 (1.388)		-2.576** (0.973)	-0.082 (0.508)
Instrumental manipulation checks group	0.763 (1.459)	2.576** (0.973)		2.494** (0.897)
Motivational messages group	-1.732 (1.216)	0.082 (0.508)	-2.494** (0.897)	
$N_t$	0.111** (0.035)	0.111** (0.035)	0.111** (0.035)	0.111** (0.035)
Time spent on demographical questions	0.010** (0.002)	0.010** (0.002)	0.010** (0.002)	0.010** (0.002)
Pre-treatment check passage	0.615 (0.737)	0.615 (0.737)	0.615 (0.737)	0.615 (0.737)
Male	1.316 (0.814)	1.316 (0.814)	1.316 (0.814)	1.316 (0.814)
Age	0.141* (0.061)	0.141* (0.061)	0.141* (0.061)	0.141* (0.061)
CCP membership	0.928 (1.147)	0.928 (1.147)	0.928 (1.147)	0.928 (1.147)
Marital status	0.424 (0.756)	0.424 (0.756)	0.424 (0.756)	0.424 (0.756)
Education level	0.456 (0.501)	0.456 (0.501)	0.456 (0.501)	0.456 (0.501)
Parental education level	-0.038 (0.307)	-0.038 (0.307)	-0.038 (0.307)	-0.038 (0.307)
Urban status	-0.124 (0.874)	-0.124 (0.874)	-0.124 (0.874)	-0.124 (0.874)
Income	0.714 (0.551)	0.714 (0.551)	0.714 (0.551)	0.714 (0.551)

Family income	-0.600 (0.374)	-0.600 (0.374)	-0.600 (0.374)	-0.600 (0.374)
Political interest	-2.002* (0.954)	-2.002* (0.954)	-2.002* (0.954)	-2.002* (0.954)
Frequent use of Weibo	0.436 (0.526)	0.436 (0.526)	0.436 (0.526)	0.436 (0.526)
Frequent use of Wechat	0.236 (0.970)	0.236 (0.970)	0.236 (0.970)	0.236 (0.970)
Frequent use of Internet forum	-0.290 (0.338)	-0.290 (0.338)	-0.290 (0.338)	-0.290 (0.338)
Frequent use of other social media	-0.031 (0.508)	-0.031 (0.508)	-0.031 (0.508)	-0.031 (0.508)
Most recent news consumption through Weibo	0.344 (0.356)	0.344 (0.356)	0.344 (0.356)	0.344 (0.356)
Most recent news consumption through Wechat	0.474 (0.379)	0.474 (0.379)	0.474 (0.379)	0.474 (0.379)
Most recent news consumption through Internet forum	-0.867 (0.494)	-0.867 (0.494)	-0.867 (0.494)	-0.867 (0.494)
Most recent news consumption through other social media	-0.446 (0.579)	-0.446 (0.579)	-0.446 (0.579)	-0.446 (0.579)
Number of Obs.	27153	27153	27153	27153
R <sup>2</sup> within	0.0003	0.0003	0.0003	0.0003
R <sup>2</sup> between	0.0931	0.0931	0.0931	0.0931
R <sup>2</sup> overall	0.0102	0.0102	0.0102	0.0102

*Notes:* The dependent variable is respondents' time spent on an experimental question (in seconds) at question  $t$  ( $t = 1, 2, \dots, 21$ ). Independent variables include the dummy variables *Control group* (which is equal to 1 if respondents are in the control group or to 0 otherwise), *Combination group* (which is equal to 1 if the respondents are in the combination group or to 0 otherwise), *Instrumental manipulation checks group* (which is equal to 1 if respondents are in the Instrumental manipulation checks group or to 0 otherwise), *Motivational messages group* (which is equal to 1 if respondents are in the motivational messages group or to 0 otherwise), *question order*  $N_t$ , respondents' *time spent on demographics-related questions*, *pre-treatment check passage* (which is equal to 1 if respondents correctly answered the pre-treatment instrumental manipulation check question or to 0 otherwise). The description of other variables are the same as described in *Notes* of Table 1. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**TABLE 3: Number of Questions Viewed For the Willingness-to-Cooperate Question**

	(1)	(2)	(3)	(4)
Control group		0.083 (0.123)	-0.049 (0.124)	-0.050 (0.119)
Combination group	-0.083 (0.123)		-0.132 (0.121)	-0.132 (0.114)
Instrumental manipulation checks group	0.049 (0.124)	0.132 (0.121)		-0.000 (0.117)
Motivational messages group	0.050 (0.119)	0.132 (0.114)	0.000 (0.117)	
Time spent on demographical questions	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Pre-treatment check passage	0.093 (0.134)	0.093 (0.134)	0.093 (0.134)	0.093 (0.134)
Male	-0.160 (0.091)	-0.160 (0.091)	-0.160 (0.091)	-0.160 (0.091)
Age	0.002 (0.006)	0.002 (0.006)	0.002 (0.006)	0.002 (0.006)
CCP membership	0.016 (0.099)	0.016 (0.099)	0.016 (0.099)	0.016 (0.099)
Marital status	-0.077 (0.138)	-0.077 (0.138)	-0.077 (0.138)	-0.077 (0.138)
Education level	0.068 (0.062)	0.068 (0.062)	0.068 (0.062)	0.068 (0.062)
Parental education level	-0.016 (0.036)	-0.016 (0.036)	-0.016 (0.036)	-0.016 (0.036)
Urban status	0.110 (0.127)	0.110 (0.127)	0.110 (0.127)	0.110 (0.127)
Income	-0.121** (0.045)	-0.121** (0.045)	-0.121** (0.045)	-0.121** (0.045)
Family income	0.113** (0.043)	0.113** (0.043)	0.113** (0.043)	0.113** (0.043)
Political interest	0.164* (0.081)	0.164* (0.081)	0.164* (0.081)	0.164* (0.081)
Frequent use of Weibo	0.013 (0.058)	0.013 (0.058)	0.013 (0.058)	0.013 (0.058)
Frequent use of Wechat	0.056 (0.101)	0.056 (0.101)	0.056 (0.101)	0.056 (0.101)
Frequent use of Internet forum	-0.023 (0.058)	-0.023 (0.058)	-0.023 (0.058)	-0.023 (0.058)
Frequent use of other social media	0.087 (0.055)	0.087 (0.055)	0.087 (0.055)	0.087 (0.055)
Most recent news consumption through Weibo	-0.012 (0.062)	-0.012 (0.062)	-0.012 (0.062)	-0.012 (0.062)
Most recent news consumption through Wechat	-0.053 (0.059)	-0.053 (0.059)	-0.053 (0.059)	-0.053 (0.059)
Most recent news consumption through Internet forum	-0.059 (0.057)	-0.059 (0.057)	-0.059 (0.057)	-0.059 (0.057)
Most recent news consumption through other social media	0.014	0.014	0.014	0.014

	(0.052)	(0.052)	(0.052)	(0.052)
Number of Obs.	1293	1293	1293	1293
R <sup>2</sup>	0.1296	0.1296	0.1296	0.1296
Root MSE	1.4807	1.4807	1.4807	1.4807

*Notes:* The dependent variable is the number of questions respondents chose to view for the willingness-to-cooperate question. Description of other variables are the same as those described in the *Notes* of Tables 1 and 2. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .



**TABLE 4-1: Answers Variability of the First Grid-Design Question (Level of Importance)**

	(1)	(2)	(3)	(4)
Control group		0.009 (0.025)	0.012 (0.025)	0.027 (0.023)
Combination group	-0.009 (0.025)		0.003 (0.025)	0.018 (0.024)
Instrumental manipulation checks group	-0.012 (0.025)	-0.003 (0.025)		0.015 (0.024)
Motivational messages group	-0.027 (0.023)	-0.018 (0.024)	-0.015 (0.024)	
Time spent on demographical questions	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Pre-treatment check passage	-0.007 (0.025)	-0.007 (0.025)	-0.007 (0.025)	-0.007 (0.025)
Male	-0.000 (0.018)	-0.000 (0.018)	-0.000 (0.018)	-0.000 (0.018)
Age	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)
CCP membership	-0.013 (0.020)	-0.013 (0.020)	-0.013 (0.020)	-0.013 (0.020)
Marital status	0.005 (0.033)	0.005 (0.033)	0.005 (0.033)	0.005 (0.033)
Education level	-0.020 (0.014)	-0.020 (0.014)	-0.020 (0.014)	-0.020 (0.014)
Parental education level	-0.013 (0.007)	-0.013 (0.007)	-0.013 (0.007)	-0.013 (0.007)
Urban status	-0.012 (0.028)	-0.012 (0.028)	-0.012 (0.028)	-0.012 (0.028)
Income	-0.017* (0.008)	-0.017* (0.008)	-0.017* (0.008)	-0.017* (0.008)
Family income	0.016 (0.008)	0.016 (0.008)	0.016 (0.008)	0.016 (0.008)

Political interest	-0.005	-0.005	-0.005	-0.005
	(0.019)	(0.019)	(0.019)	(0.019)
Frequent use of Weibo	-0.003	-0.003	-0.003	-0.003
	(0.012)	(0.012)	(0.012)	(0.012)
Frequent use of Wechat	-0.017	-0.017	-0.017	-0.017
	(0.037)	(0.037)	(0.037)	(0.037)
Frequent use of Internet forum	-0.008	-0.008	-0.008	-0.008
	(0.011)	(0.011)	(0.011)	(0.011)
Frequent use of other social media	-0.028*	-0.028*	-0.028*	-0.028*
	(0.014)	(0.014)	(0.014)	(0.014)
Most recent news consumption through Weibo	-0.004	-0.004	-0.004	-0.004
	(0.015)	(0.015)	(0.015)	(0.015)
Most recent news consumption through Wechat	-0.001	-0.001	-0.001	-0.001
	(0.013)	(0.013)	(0.013)	(0.013)
Most recent news consumption through Internet forum	-0.013	-0.013	-0.013	-0.013
	(0.012)	(0.012)	(0.012)	(0.012)
Most recent news consumption through other social media	-0.010	-0.010	-0.010	-0.010
	(0.016)	(0.016)	(0.016)	(0.016)
Number of Obs.	1293	1293	1293	1293
R <sup>2</sup>	0.1374	0.1374	0.1374	0.1374
Root MSE	0.29414	0.29414	0.29414	0.29414

*Notes:* The dependent variable is respondents' answers variability of the first grid-design question. Description of other variables are the same as those described in the *Notes* of Tables 1 and 2. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**TABLE 4-2: Answers Variability of the Second Grid-design Question (Frequent Use)**

	(1)	(2)	(3)	(4)
Control group		-0.061 (0.036)	-0.015 (0.036)	-0.030 (0.035)
Combination group	0.061 (0.036)		0.046 (0.036)	0.032 (0.034)
Instrumental manipulation checks group	0.015 (0.036)	-0.046 (0.036)		-0.015 (0.035)
Motivational messages group	0.030 (0.035)	-0.032 (0.034)	0.015 (0.035)	
Time spent on demographical questions	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Pre-treatment check passage	0.063 (0.037)	0.063 (0.037)	0.063 (0.037)	0.063 (0.037)
Male	0.030 (0.027)	0.030 (0.027)	0.030 (0.027)	0.030 (0.027)
Age	-0.003* (0.002)	-0.003* (0.002)	-0.003* (0.002)	-0.003* (0.002)
CCP membership	-0.034 (0.030)	-0.034 (0.030)	-0.034 (0.030)	-0.034 (0.030)
Marital status	-0.128** (0.041)	-0.128** (0.041)	-0.128** (0.041)	-0.128** (0.041)
Education level	0.001 (0.017)	0.001 (0.017)	0.001 (0.017)	0.001 (0.017)
Parental education level	-0.009 (0.011)	-0.009 (0.011)	-0.009 (0.011)	-0.009 (0.011)
Urban status	0.005 (0.037)	0.005 (0.037)	0.005 (0.037)	0.005 (0.037)
Income	-0.027* (0.012)	-0.027* (0.012)	-0.027* (0.012)	-0.027* (0.012)
Family income	0.007 (0.012)	0.007 (0.012)	0.007 (0.012)	0.007 (0.012)

Political interest	-0.010	-0.010	-0.010	-0.010
	(0.024)	(0.024)	(0.024)	(0.024)
Frequent use of Weibo	-0.013	-0.013	-0.013	-0.013
	(0.017)	(0.017)	(0.017)	(0.017)
Frequent use of Wechat	0.114**	0.114**	0.114**	0.114**
	(0.039)	(0.039)	(0.039)	(0.039)
Frequent use of Internet forum	-0.063**	-0.063**	-0.063**	-0.063**
	(0.016)	(0.016)	(0.016)	(0.016)
Frequent use of other social media	-0.026	-0.026	-0.026	-0.026
	(0.016)	(0.016)	(0.016)	(0.016)
Most recent news consumption through Weibo	-0.026	-0.026	-0.026	-0.026
	(0.020)	(0.020)	(0.020)	(0.020)
Most recent news consumption through Wechat	-0.011	-0.011	-0.011	-0.011
	(0.021)	(0.021)	(0.021)	(0.021)
Most recent news consumption through Internet forum	-0.013	-0.013	-0.013	-0.013
	(0.017)	(0.017)	(0.017)	(0.017)
Most recent news consumption through other social media	-0.014	-0.014	-0.014	-0.014
	(0.014)	(0.014)	(0.014)	(0.014)
Number of Obs.	1293	1293	1293	1293
R <sup>2</sup>	0.2880	0.2880	0.2880	0.2880
Root MSE	0.43413	0.43413	0.43413	0.43413

*Notes:* The dependent variable is respondents' answers variability of the second grid-design question. Description of other variables are the same as those described in the *Notes* of Tables 1 and 2. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**Table 5-1: Instrumental Manipulation Checks Passages Condition by Groups**

	Marathon question	First instrumental manipulation check question (website)	Second instrumental manipulation check question (color)	Number of Obs. (Instrumental manipulation checks group)	Percentage (Instrumental manipulation checks group)	Number of Obs. (Combination group)	Percentage (Combination group)
Group 1	√	√	√	64	20.98%	134	21.37%
Group 2	√	×	×	114	37.38%	245	39.07%
Group 3	√	√	×	0	0%	1	0.16%
Group 4	×	√	√	2	0.66%	7	1.12%
Group 5	√	×	√	93	30.49%	171	27.27%
Group 6	×	√	×	0	0%	0	0%
Group 7	×	×	√	9	2.95%	17	2.71%
Group 8	×	×	×	23	7.54%	52	8.29%
				Total: 305	100%	Total: 627	100%

**Table 5-2: Effects of Instrumental Manipulation Check Questions Passages on Time Spent on Experimental Questions**

	(1)	(2)
Group 1	2.972 (2.833)	-0.782 (1.522)
Group 2	5.511 (3.255)	0.781 (1.622)
Group 3		-6.587 (4.030)
Group 4	-3.651 (5.335)	3.067 (3.789)
Group 5	4.347 (3.001)	-0.053 (1.531)
Group 7	2.776 (3.631)	-2.750 (1.788)
$N_t$	0.088 (0.096)	0.068 (0.052)
Time spent on demographical questions	0.007* (0.003)	0.008** (0.002)
Male	4.816* (2.013)	2.113* (1.047)
Age	0.130 (0.103)	0.118* (0.052)
CCP membership	0.927 (1.726)	0.046 (0.921)
Marital status	-1.210 (2.318)	0.544 (1.355)
Education level	1.692 (1.555)	0.877 (0.728)
Parental education level	-0.800 (0.848)	-0.661 (0.494)
Urban status	4.791 (2.896)	1.804 (1.459)
Income	0.868 (0.972)	0.410 (0.519)
Family income	-0.045 (0.752)	-0.323 (0.404)
Political interest	-1.250 (1.544)	-1.869 (1.032)
Frequent use of Weibo	-0.440 (1.058)	0.246 (0.624)
Frequent use of Wechat	-10.312* (4.582)	-1.503 (1.977)

Frequent use of Internet forum	-0.395 (1.174)	-0.131 (0.465)
Frequent use of other social media	0.427 (1.365)	0.071 (0.735)
Most recent news consumption through Weibo	1.878 (1.418)	0.530 (0.640)
Most recent news consumption through Wechat	1.900* (0.868)	0.206 (0.574)
Most recent news consumption through Internet forum	-2.506 (1.598)	-1.223 (0.832)
Most recent news consumption through other social media	1.707 (1.701)	0.501 (0.964)
Number of Obs.	6405	13167
R <sup>2</sup> within	0.0001	0.0002
R <sup>2</sup> between	0.2601	0.1476
R <sup>2</sup> overall	0.0242	0.0155

*Notes:* The dependent variable is respondents' time spent on an experimental question at question  $t$  ( $t = 1, 2, \dots, 21$ ). Independent variables include the dummy variables groups 1, 2, 3, 4, 5, and 7, which is equal to 1 if the respondents are in groups 1, 2, 3, 4, 5, and 7, respectively, or to 0 otherwise. Group 8 is the baseline group. Descriptions of other variables are the same as described in the *Notes* of Tables 1 and 2. Specification 1 shows the results of respondents in the Instrumental manipulation checks group, whereas specification 2 shows that of respondents in the Combination group. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**TABLE 5-3: Effects of Instrumental Manipulation Check Questions Passages on Willingness-to-Cooperate**

	(1)	(2)
Group 1	1.138** (0.436)	0.762** (0.251)
Group 2	0.762 (0.436)	0.376 (0.239)
Group 3		5.249** (0.669)
Group 4	2.218** (0.676)	1.875** (0.432)
Group 5	1.197** (0.440)	0.801** (0.249)
Group 7	1.032 (0.679)	1.054* (0.413)
Time spent on demographical questions	-0.000 (0.000)	-0.000 (0.000)
Male	-0.382 (0.214)	-0.256 (0.132)
Age	0.013 (0.015)	0.014 (0.008)
CCP membership	0.141 (0.231)	0.089 (0.137)
Marital status	-0.782* (0.333)	-0.189 (0.211)
Education level	0.203 (0.156)	0.189* (0.095)
Parental education level	0.035 (0.086)	-0.048 (0.054)
Urban status	-0.161 (0.314)	0.111 (0.195)
Income	-0.066 (0.121)	-0.107 (0.065)
Family income	0.084 (0.117)	0.047 (0.061)
Political interest	0.394* (0.168)	0.241* (0.116)
Frequent use of Weibo	-0.022 (0.141)	0.120 (0.086)
Frequent use of Wechat	-0.460 (0.418)	-0.045 (0.177)
Frequent use of Internet forum	0.015 (0.153)	-0.101 (0.086)



Frequent use of other social media	0.036	0.099
	(0.119)	(0.077)
Most recent news consumption through Weibo	-0.192	-0.172
	(0.167)	(0.089)
Most recent news consumption through Wechat	-0.108	-0.079
	(0.132)	(0.098)
Most recent news consumption through Internet forum	-0.214	-0.155
	(0.157)	(0.089)
Most recent news consumption through other social media	0.152	0.023
	(0.134)	(0.075)
<hr/>		
Number of Obs.	305	627
R <sup>2</sup>	0.3151	0.2144
Root MSE	1.4834	1.4334

*Notes:* The dependent variable is the number of questions respondents chose to view for the willingness-to-cooperate question. Descriptions of other variables are the same as described in the *Notes* of Tables 1, 2, and 5-2. Specification 1 shows the results of respondents in the Instrumental manipulation checks group, whereas specification 2 shows that of respondents in the Combination group. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

**Table 5-4: Effects of Instrumental Manipulation Check Questions Passages on Answers variability of Grid-design Questions**

	Level of Importance		Frequent Use	
	(1)	(2)	(3)	(4)
Group 1	-0.075 (0.073)	-0.013 (0.049)	0.140 (0.130)	0.036 (0.074)
Group 2	-0.033 (0.067)	0.015 (0.046)	0.162 (0.130)	0.046 (0.072)
Group 3		1.471** (0.125)		-0.774** (0.201)
Group 4	0.081 (0.169)	0.031 (0.098)	-0.164 (0.340)	-0.136 (0.192)
Group 5	-0.083 (0.066)	0.012 (0.045)	0.058 (0.125)	0.089 (0.071)
Group 7	-0.143 (0.096)	-0.033 (0.054)	0.222 (0.201)	0.056 (0.119)
Time spent on demographical questions	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000* (0.000)
Male	-0.001 (0.037)	-0.004 (0.025)	-0.002 (0.070)	0.065 (0.041)
Age	-0.003 (0.003)	-0.003 (0.002)	-0.005 (0.004)	-0.002 (0.003)
CCP membership	0.005 (0.041)	0.003 (0.031)	-0.059 (0.066)	-0.044 (0.046)
Marital status	0.080 (0.057)	0.051 (0.039)	-0.082 (0.108)	-0.132* (0.066)
Education level	-0.022 (0.026)	-0.043* (0.020)	-0.041 (0.043)	-0.043 (0.029)
Parental education level	-0.001 (0.016)	-0.001 (0.011)	-0.040 (0.026)	-0.016 (0.018)
Urban status	-0.008 (0.059)	-0.032 (0.045)	0.032 (0.095)	0.037 (0.060)
Income	-0.048** (0.016)	-0.021 (0.012)	-0.059* (0.029)	-0.029 (0.018)
Family income	0.037* (0.017)	0.017 (0.011)	0.032 (0.028)	0.020 (0.018)
Political interest	0.032 (0.037)	0.014 (0.027)	-0.071 (0.053)	-0.051 (0.036)
Frequent use of Weibo	-0.029 (0.024)	0.007 (0.018)	0.008 (0.040)	-0.012 (0.025)
Frequent use of Wechat	0.121* (0.057)	0.023 (0.040)	0.030 (0.130)	0.097 (0.057)
Frequent use of Internet forum	0.003	-0.031	-0.020	-0.076**

	(0.024)	(0.016)	(0.039)	(0.024)
Frequent use of other social media	-0.017	-0.017	-0.037	-0.006
	(0.022)	(0.016)	(0.035)	(0.023)
Most recent news consumption through Weibo	-0.006	-0.040	0.030	0.023
	(0.032)	(0.021)	(0.057)	(0.031)
Most recent news consumption through Wechat	0.010	-0.002	0.035	0.014
	(0.027)	(0.021)	(0.052)	(0.035)
Most recent news consumption through Internet forum	-0.020	0.017	-0.030	0.005
	(0.031)	(0.020)	(0.046)	(0.026)
Most recent news consumption through other social media	-0.073**	-0.047*	-0.027	-0.007
	(0.026)	(0.019)	(0.042)	(0.020)
Number of Obs.	305	627	305	627
R <sup>2</sup>	0.3338	0.2289	0.4081	0.3136
Root MSE	.27861	.28764	.44682	.44127

*Notes:* The dependent variable is respondents' answers variability of two grid-design questions. Descriptions of other variables are the same as described in the *Notes* of Tables 1, 2, and 5-2. Specifications 1 and 2 show respondents' answers variability for the *Level of Importance* question, whereas specifications 3 and 4 demonstrate respondents' answers variability for the *Frequent Use* question. Specifications 1 and 3 show results of respondents in the Instrumental manipulation checks group, whereas specifications 2 and 4 show the results of respondents in the Combination group. Occupational fixed effects, social media usage fixed effects, provincial fixed effects, and cutoff points are not reported, but they are available on request. Standard errors clustered at the individual level are in parentheses. \*\* $p < .01$ , \* $p < .05$ .

## **7. Conclusion**

Many methods have been designed and reported to increase survey response quality thus far. However, their effectiveness warrants investigation. In this study, we limited our focus to two prevalent survey quality boosters: instrumental manipulation checks and survey motivational messages. We analyzed their effectiveness in increasing survey respondents' survey commitment. Three measurements were used to operationalize this commitment: respondents' time spent on survey questions, their willingness of answering more survey questions, and their answers variability of grid-design questions. Through an online survey experiment, we find that compared with the respondents exposed to motivational messages, those exposed to instrumental manipulation checks were more likely to spend more time on survey questions. In addition, answering instrumental manipulation check questions correctly possibly had positive effects on the respondents' willingness to cooperate in the survey (i.e., they tended to be more willing to answer more survey questions). We find that neither instrumental manipulation checks nor survey motivational messages had significant effects on increasing the respondents' answers variability of grid-design questions and their willingness of answering more survey questions. The ineffectiveness of instrumental manipulation checks in the two aforementioned aspects challenges some past findings that suggest the utility of instrumental manipulation checks (Berinsky, Margolis, & Sances, 2014). Nevertheless, the focus of the current study and that of Berinsky, Margolis and Sances's (2014) work demonstrates some fundamental differences. In their work, the authors mainly use instrumental manipulation checks as screeners to identify shrinkers—which are inattentive survey respondents. In this regard, the utility of instrumental manipulation checks as

screeners that separate shirkers from workers is well-recognized. In the current study, the mere presence of instrumental manipulation checks is considered the “treatment,” and the aim is to underscore that the placement of instrumental manipulation checks may not only identify inattentive survey respondents but also increase survey response quality.

Berinsky, Margolis and Sances (2014) suggest that placing multiple instrumental manipulation checks in a survey may effectively strengthen survey validity. In addition, the authors find that answer of instrumental manipulation checks is associated with greater time spent by respondents on additional survey questions. Accordingly, we placed two instrumental manipulation checks in our survey and find that exposure to them increases survey respondents’ time spent on answering survey questions; moreover, the correct answers of instrumental manipulation checks predict respondents’ willingness of answering more survey questions. In this regard, our findings corroborate those of Berinsky, Margolis and Sances (2014). In conclusion, although instrumental manipulation checks are widely used to exclude careless or low-quality survey responses, the mere presence of instrumental manipulation checks may serve as a potential survey quality booster, which motivates survey participants to be more committed to the survey in terms of their time spent on answering survey questions.

By contrast, we find that motivational messages are not as motivational as instrumental manipulation checks. This finding may be explained as follows: Placing instrumental manipulation checks in a survey may provide survey respondents with a sense of engagement.

In particular, placing more than one manipulation check question can motivate respondents to pay more attention to the remaining questions; this is because respondents will have more than one chance to eventually realize that there are some trick questions in the survey, and they will then be more careful about the remaining questions. In other words, these checks aid in training respondents into paying more attention by making them look out for any remaining trick questions. Motivational messages, by contrast, do not require respondents to pay additional attention. They attempt to simply encourage the respondents with standardized phrasing and messages. These words may seem meaningless to the respondents and may negatively affect their patience later in the survey. Reading extra words irrelevant to the survey questions may have a reverse effect on individuals' survey commitment. Based on these results, we suggest that studies using survey methods should ideally include precise questionnaires.

In summary, we believe instrumental manipulation checks can serve as a useful tool in boosting survey quality; in particular, studies using self-report survey methods should consider applying instrumental manipulation checks to improve their survey design.

## References

- Abbey, J. D., & Meloy, M. G. (2017). Attention by design: Using attention checks to detect inattentive respondents and improve data quality. *Journal of Operations Management*, *53*, 63-70.
- Aust, F., Diedenhofen, B., Ullrich, S., & Musch, J. (2013). Seriousness checks are useful to improve data validity in online research. *Behavior Research Methods*, *45*(2), 527-535.
- Bayram, A. B. (2018). Serious subjects: A test of the seriousness technique to increase participant motivation in political science experiments. *Research & Politics*, *5*(2), 1-6.
- Berinsky, A. J., Margolis, M. F., & Sances, M. W. (2014). Separating the shirkers from the workers? Making sure respondents pay attention on self-administered surveys. *American Journal of Political Science*, *58*(3), 739-753.
- Bradburn, N. M., & Mason, W. M. (1964). The effect of question order on responses. *Journal of Marketing Research*, *1*(4), 57-61.
- Chan, R. C., Mak, W. W., Pang, I. H., Wong, S. Y., Tang, W. K., Lau, J. T., ... & Cheung, F. M. (2018). Utility and cost-effectiveness of motivational messaging to increase survey response in physicians: A randomized controlled trial. *Field Methods*, *30*(1), 37-55.
- Chmielewski, M., & Kucker, S. C. (2020). An MTurk crisis? Shifts in data quality and the impact on study results. *Social Psychological and Personality Science*, *11*(4), 464-473.
- Clifford, S., & Jerit, J. (2015). Do attempts to improve respondent attention increase social desirability bias?. *Public Opinion Quarterly*, *79*(3), 790-802.
- Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical

- Turk valid for research on political ideology?. *Research & Politics*, 2(4), 1-9.
- Couper, M. P., Traugott, M. W., & Lamias, M. J. (2001). Web survey design and administration. *Public Opinion Quarterly*, 65(2), 230-253.
- Galesic, M., & Bosnjak, M. (2009). Effects of questionnaire length on participation and indicators of response quality in a web survey. *Public Opinion Quarterly*, 73(2), 349-360.
- Ganassali, S. (2008). The influence of the design of web survey questionnaires on the quality of responses. *Survey Research Methods*, 2(1), 21-32.
- Gritz, A. S. (2004). The impact of material incentives on response quantity, response quality, sample composition, survey outcome and cost in online access panels. *International Journal of Market Research*, 46(3), 327-345.
- Gummer, T., Roßmann, J., & Silber, H. (2021). Using instructed response items as attention checks in web surveys: Properties and implementation. *Sociological Methods & Research*, 50(1), 238-264.
- Hauser, D. J., & Schwarz, N. (2015). It's a trap! Instructional manipulation checks prompt systematic thinking on "tricky" tasks. *Sage Open*, 5(2), 1-6.
- Hauser, D. J., & Schwarz, N. (2016). Attentive turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior Research Methods*, 48(1), 400-407.
- Hauser, D. J., Ellsworth, P. C., & Gonzalez, R. (2018). Are manipulation checks necessary?. *Frontiers in Psychology*, 9, 1-10.
- Healey, B. (2007). Drop downs and scroll mice: The effect of response option format and



- input mechanism employed on data quality in web surveys. *Social Science Computer Review*, 25(1), 111-128.
- Heerwegh, D., & Loosveldt, G. (2006). An experimental study on the effects of personalization, survey length statements, progress indicators, and survey sponsor logos in Web Surveys. *Journal of Official Statistics*, 22(2), 191-210.
- Helsing, K. J., & Comstock, G. W. (1976). Response variation and location of questions within a questionnaire. *International Journal of Epidemiology*, 5(2), 125-130.
- Kane, J. V., & Barabas, J. (2019). No harm in checking: Using factual manipulation checks to assess attentiveness in experiments. *American Journal of Political Science*, 63(1), 234-249.
- Knäuper, B. (1999). The impact of age and education on response order effects in attitude measurement. *Public Opinion Quarterly*, 63(3), 347-370.
- Knäuper, B., Carrière, K., Chamandy, M., Xu, Z., Schwarz, N., & Rosen, N. O. (2016). How aging affects self-reports. *European Journal of Ageing*, 13(2), 185-193.
- Kotzian, P., Stoeber, T., Hoos, F., & Weissenberger, B. E. (2020). To be or not to be in the sample? On using manipulation checks in experimental accounting research. *Accounting Research Journal*, 33(3), 469-482.
- Kraut, A. I., Wolfson, A. D., & Rothenberg, A. (1975). Some effects of position on opinion survey items. *Journal of Applied Psychology*, 60(6), 774-776.
- Ladini, R. (2021). Assessing general attentiveness to online panel surveys: The use of instructional manipulation checks. *International Journal of Social Research Methodology*, 1-14.

- Lenzner, T. (2012). Effects of survey question comprehensibility on response quality. *Field Methods, 24*(4), 409-428.
- Li, X., Shi, W., & Zhu, B. (2017). The face of internet recruitment: Evaluating the labor markets of online crowdsourcing platforms in China. *Research & Politics, 5*(1), 1-8.
- Martinsson, J., Dumitrescu, D., & Riedel, K. (2017). Recruiting an online panel from another online survey: Consequences of framing and placement of the recruitment question. *International Journal of Public Opinion Research, 29*(2), 339-351.
- Matzat, U., Snijders, C., & van der Horst, W. (2009). Effects of different types of progress indicators on drop-out rates in web surveys. *Social Psychology, 40*(1), 43-52.
- McFarland, S. G. (1981). Effects of question order on survey responses. *Public Opinion Quarterly, 45*(2), 208-215.
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods, 17*(3), 437-455.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology, 45*(4), 867-872.
- Paas, L. J., & Morren, M. (2018). Please do not answer if you are reading this: Respondent attention in online panels. *Marketing Letters, 29*(1), 13-21.
- Paas, L. J., Dolnicar, S., & Karlsson, L. (2018). Instructional manipulation checks: A longitudinal analysis with implications for MTurk. *International Journal of Research in Marketing, 35*(2), 258-269.
- Peytchev, A. (2009). Survey breakoff. *Public Opinion Quarterly, 73*(1), 74-97.

- Read, B., Wolters, L., & Berinsky, A. J. (2021). Racing the clock: Using response time as a proxy for attentiveness on self-administered surveys. *Political Analysis*, 1-20.
- Reips, U. D. (2000). The web experiment method: Advantages, disadvantages, and solutions. In M. H. Birnbaum (Ed.). *Psychological experiments on the Internet* (pp. 89-117). Cambridge, MA: Academic Press.
- Reips, U. D. (2002a). Standards for internet-based experimenting. *Experimental Psychology*, 49(4), 243-256.
- Reips, U. D. (2002b). Internet-based psychological experimenting: Five dos and five don'ts. *Social Science Computer Review*, 20(3), 241-249.
- Revilla, M. (2016). Impact of raising awareness of respondents on the measurement quality in a web survey. *Quality & Quantity*, 50(4), 1469-1486.
- Rolstad, S., Adler, J., & Rydén, A. (2011). Response burden and questionnaire length: Is shorter better? A review and meta-analysis. *Value in Health*, 14(8), 1101-1108.
- Sahlqvist, S., Song, Y., Bull, F., Adams, E., Preston, J., & Ogilvie, D. (2011). Effect of questionnaire length, personalisation and reminder type on response rate to a complex postal survey: Randomised controlled trial. *BMC Medical Research Methodology*, 11(1), 1-8.
- Sakshaug, J. W., & Crawford, S. D. (2010). The impact of textual messages of encouragement on web survey breakoffs: An experiment. *International Journal of Internet Science*, 4(1), 50-60.
- Sakshaug, J. W., & Kreuter, F. (2014). The effect of benefit wording on consent to link survey and administrative records in a web survey. *Public Opinion Quarterly*, 78(1), 166-176.

- Schuman, H., & Presser, S. (1996). *Questions and answers in attitude surveys: Experiments on question form, wording, and context*. Newcastle upon Tyne, UK: Sage.
- Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist*, *54*(2), 93-105.
- Smith, R., Olah, D., Hansen, B., & Cumbo, D. (2003). The effect of questionnaire length on participant response rate: A case study in the US cabinet industry. *Forest Products Journal*, *53*(11/12), 33-36.
- Szelenyi, K., Bryant, A. N., & Lindholm, J. A. (2005). What money can buy: Examining the effects of prepaid monetary incentives on survey response rates among college students. *Educational Research and Evaluation*, *11*(4), 385-404.
- Teclaw, R., Price, M. C., & Osatuke, K. (2012). Demographic question placement: Effect on item response rates and means of a veterans health administration survey. *Journal of Business and Psychology*, *27*(3), 281-290.
- Tourangeau, R., & Ye, C. (2009). The framing of the survey request and panel attrition. *Public Opinion Quarterly*, *73*(2), 338-348.
- Verbree, A. R., Toepoel, V., & Perada, D. (2020). The effect of seriousness and device use on data quality. *Social Science Computer Review*, *38*(6), 720-738.
- Villar, A., Callegaro, M., & Yang, Y. (2013). Where am I? A meta-analysis of experiments on the effects of progress indicators for web surveys. *Social Science Computer Review*, *31*(6), 744-762.
- Yan, T., & Tourangeau, R. (2008). Fast times and easy questions: The effects of age, experience and question complexity on web survey response times. *Applied Cognitive*

*Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, 22(1), 51-68.

## Chapter 5: Conclusion

In this thesis, I studied Chinese netizens' online behaviors, particularly their information consumption preferences. By using two online survey experiments, this study finds that Chinese netizens tend to self-select to expose themselves to critical information, which is generated from other netizens and challenges the state's policies. In addition, they are more likely to consume critical information conveyed in an emotional manner. Exposure to such information results in netizens' low support for the policies as well — suggesting that online discussions substantially influence public opinion. I also conducted a study on the survey methods by examining the effectiveness of two survey quality boosters: instrumental manipulation checks and survey motivational messages. Through an online experiment, this study finds that compared with motivational messages, instrumental manipulation checks could increase respondents' survey commitment; respondents exposed to instrumental manipulation checks are more likely to spend more time on survey questions.

This study makes contributions to the literature on citizens' resilience to information manipulation in authoritarian regimes in the new media era. With the emergence of social media, some optimistic scholars have argued that social media will speed up the democratization process in authoritarian regimes because it allows citizens to self-generate, spread, and consume information that deviates from official propaganda. Social media can be a liberalization technology that facilitates online political discussions and participation, shapes citizens' political attitudes, arouses their political awareness, and even, mobilizes them

to engage in collective actions. Social media also allows people to supervise government officials by uncovering corruption and malpractice among government officials and advocate for freedom and democracy online (Diamond, 2010; Lynch, 2011; Shirky, 2011; Reuter & Szakonyi, 2015; Shao & Wang, 2017; Huhe, Tang, & Chen, 2018; Tang & Huhe, 2020). By contrast, some scholars have indicated that it may be too idealistic to claim such a great power of social media because autocrats in the 21st century are sophisticated information manipulation users. Through censorship and propaganda, the autocrats are able to co-opt all types of media as tools to sustain regime controls and maintain regime legitimacy (Stockmann & Gallagher, 2011; Sullivan, 2012, 2014; Lorentzen, 2014; Gunitsky, 2015; Rød & Weidmann, 2015; Huang, 2015; Chen & Xu, 2017; Guriev & Treisman, 2019). This study, however, argues that despite the complexity in China's media environment, Chinese netizens are not passive receivers of online information. Many appear to have the ability to differentiate critical information from state-promoted propaganda on social media and tend to proactively consume alternative information to make themselves more informed. This is a type of survival strategy in authoritarian regimes. When information diffusion is highly monopolized and dominated by autocracies, citizens need to find an alternative channel for information acquisition. As seen in the cases of the Chernobyl disaster and the early stages of the COVID-19 outbreak, when autocracies encounter a national disaster, they may choose to cover up the threat and suppress the information in the first place as a coping strategy (Ludwig, 2020; Zhang, 2020; Stasavage, 2020; Verma, 2020; Yan, 2020), because they do not want the citizens to know that they have failed to provide safety to their people and stability to their society. This type of failure can seriously damage an autocracy's legitimacy and

competence. They may also use propaganda to make the public believe that the government is handling the crisis well. In such cases, skeptical citizens may need information sources other than officially disclosed news to learn what is actually happening and to react in advance so as to prevent future tragedies. Provided that social media can still be used as an alternative information source, its contribution and potential should be recognized. Future studies should further explore citizens' strategic use of social media in authoritarian regimes and examine how citizens can be resilient to information manipulation despite constraints.



## References

- Chen, J., & Xu, Y. (2017). Information manipulation and reform in authoritarian regimes. *Political Science Research and Methods*, 5(1), 163-178.
- Diamond, L. (2010). Liberation technology. *Journal of Democracy*, 21(3), 69-83.
- Gunitsky, S. (2015). Corrupting the cyber-commons: Social media as a tool of autocratic stability. *Perspectives on Politics*, 13(1), 42-54.
- Guriey, S., & Treisman, D. (2019). Informational autocrats. *Journal of Economic Perspectives*, 33(4), 100-127.
- Huang, H. (2015). Propaganda as signaling. *Comparative Politics*, 47(4), 419-444.
- Huhe, N., Tang, M., & Chen, J. (2018). Creating democratic citizens: Political effects of the internet in China. *Political Research Quarterly*, 71(4), 757-771.
- Lorentzen, P. (2014). China's strategic censorship. *American Journal of Political Science*, 58(2), 402-414.
- Ludwig, J. Z. (2020). Chernobyl, coronavirus, and the art of the authoritarian cover-up: Who is to blame, and what is to be done? *SAGE International Australia*, 1, 1-7.
- Lynch, M. (2011). After Egypt: The limits and promise of online challenges to the authoritarian Arab state. *Perspectives on Politics*, 9(2), 301-310.
- Reuter, O. J., & Szakonyi, D. (2015). Online social media and political awareness in authoritarian regimes. *British Journal of Political Science*, 45(1), 29-51.
- Rød, E. G., & Weidmann, N. B. (2015). Empowering activists or autocrats? The internet in authoritarian regimes. *Journal of Peace Research*, 52(3), 338-351.

- Shao, P., & Wang, Y. (2017). How does social media change Chinese political culture? The formation of fragmented public sphere. *Telematics and Informatics*, 34(3), 694-704.
- Shirky, C. (2011). The political power of social media: Technology, the public sphere, and political change. *Foreign affairs*, 28-41.
- Stasavage, D. (2020). Democracy, autocracy, and emergency threats: Lessons for COVID-19 from the last thousand years. *International Organization*, 74(S1), E1-E17.
- Stockmann, D., & Gallagher, M. E. (2011). Remote control: How the media sustain authoritarian rule in China. *Comparative Political Studies*, 44(4), 436-467.
- Sullivan, J. (2012). A tale of two microblogs in China. *Media, Culture & Society*, 34(6), 773-783.
- Sullivan, J. (2014). China's Weibo: Is faster different?. *New Media & Society*, 16(1), 24-37.
- Tang, M., & Huhe, N. (2020). Parsing the effect of the internet on regime support in China. *Government and Opposition*, 55(1), 130-146.
- Verma, R. (2020). China's diplomacy and changing the COVID-19 narrative. *International Journal*, 75(2), 248-258.
- Yan, F. (2020). Managing 'digital China' during the Covid-19 pandemic: Nationalist stimulation and its backlash. *Postdigital Science and Education*, 2(3), 639-644.
- Zhang, C. (2020). Covid-19 in China: From 'Chernobyl moment' to impetus for nationalism. *Made in China Journal*, 5(2), 162-165.

## Appendices

### Appendix 1: *Questions and Coding of Control Variables*

<b>Control variable</b>	<b>Question &amp; Coding</b>
<b>Male</b>	<b>What is your gender?</b> 您的性别是? Male - 1 男 Female - 0 女
<b>Age</b>	<b>What is your age?</b> 您的年龄是? Numeric
<b>CCP member</b>	<b>What is your political affiliation?</b> 您的政治面貌是? Party member - 1 党员 Non-party member - 0 非党员
<b>Education level</b>	<b>What is your current education level?</b> 您目前的学历或教育程度是? Below primary school - 1 小学以下 Primary school - 2 小学 Middle school - 3 初中 High school - 4 高中 Junior College - 5 大专 Undergraduate - 6 本科 Graduate - 7 硕士 Doctorial - 8 博士
<b>Income level</b>	<b>What is your current annual income level? (Including salary and other income)</b> 您目前的个人年收入水平是? (包括工资以及其他收入) Below 20,000 - 1            2 万元以下 20,000 - 50,000 - 2        2-5 万 50,000 - 100,000 - 3       5-10 万 100,000 - 150,000 - 4      10-15 万 150,000 - 200,000 - 5      15-20 万 200,000 - 300,000 - 6      20-30 万 300,000 - 500,000 - 7      30-50 万 500,000 - 1,000,000 - 8    50-100 万 Above 1,000,000 - 9        100 万以上
<b>Province</b>	<b>The place you live in belongs to?</b> 您所在的地区属于? Options include: 31 provinces (and municipalities) in Mainland China excluding Hong Kong, Macau and Taiwan 选项包括: 31 个中国大陆的省份和直辖市 (除去香港、澳门和台湾)

<b>Political interest</b>	<p><b>To what extent are you interested in current affairs?</b> 多大程度上你对时事感兴趣?</p> <p>Very interested - 5 非常感兴趣 Somewhat interested - 4 比较感兴趣 Cannot tell whether interested or not - 3 说不上感不感兴趣 Somewhat not interested - 2 比较不感兴趣 Not interested at all - 1 完全不感兴趣</p>
<b>Frequency of social media news consumption</b>	<p><b>Do you often view news about social and political affairs through Weibo or other online forums?</b> 你经常通过微博或其他网络论坛了解有关社会与时事的新闻或资讯吗?</p> <p>Often - 4 经常 Sometimes - 3 有时候 Seldom - 2 基本不会 Never - 1 从来不会</p>
<b>Frequency of social media use</b>	<p><b>How often do you use Weibo or other Internet platforms to view all kinds of information?</b> 你多久使用一次微博或其他网络平台浏览各类资讯?</p> <p>Everyday - 5 每天都使用 Several times per week - 4 每周使用几次 Several times per month - 3 每个月使用几次 Several times per year - 2 每年使用几次 Never - 1 从来不使用</p>
<b>Most recent social media use</b>	<p><b>When was the last time you used Weibo or other Internet platforms to view information?</b> 你上一次使用微博或其他网络平台浏览资讯是什么时候?</p> <p>Within an hour - 8 一个小时内曾使用过 Sometime today - 7 今天曾使用过 Sometime yesterday - 6 昨天曾使用过 Sometime this week - 5 本周内曾使用过 Sometime this month - 4 本月内曾使用过 Sometime this year - 3 今年内曾使用过 Sometime last year - 2 去年曾使用过 Sometime before last year or Never - 1 去年之前曾使用过或从未使用过</p>
<b>Frequency of social media discussion participation</b>	<p><b>Do you often participate in discussions about social hot-spot issues on Weibo or other Internet platforms?</b> 你经常在微博上或其他网络平台上参与热点事件的讨论吗?</p> <p>Often participate - 4 经常参与 Sometimes participate - 3 有时候参与 Seldom participate - 2 基本不参与 Never participate - 1 从来不参与</p>

## **Appendix 2: Five Weibo Posts of Social Policies and Comments**

### **Post 1**

[New regulation on train ticket purchase: Transfer tickets must have 40 minutes interval in between] Reporter acquired information from Chinese Railway 12306 that starting from September 21st, the time interval between two ticket purchases will be increased. When purchasing two train tickets via the Internet, telephone, ticket vending machine, or ticket vending window, passengers should purchase two tickets that has more than 40 minutes time interval in between, otherwise the purchase will fail.

【火车票购票新规：换乘购票需间隔 40 分钟以上】记者从中国铁路 12306 获悉，从 9 月 21 日起，购买火车票新增间隔时间限制，通过网络、电话、自动售票机、窗口等方法购买 2 张或者以上火车票时，乘客所购买的 2 张车票需间隔 40 分钟以上，否则出票失败。

### **Recommended Comments**

Netizen A: "This regulation can prevent passengers from missing the second train."

Netizen B: "Support. The state must have considered more than you."

Netizen C: "40 minutes interval is pretty reasonable."

Netizen D: "Some stations don't have transfer service. The purpose of this act is to give consideration to those places."

Netizen E: "40-minute is enough. Are you so sure you won't run into any emergency? It is good to prepare early."

### **精选评论**

网友 A: “这样应该是为了能有效防止乘客错过第二班火车吧。”

网友 B: “支持，国家考虑得肯定比你们多。”

网友 C: “四十分钟的间隔时间还是比较合理的。”

网友 D: “有些车站不具备快速换乘服务，这样做也是为了照顾到这些地方啊。”

网友 E: “四十分不少了，你们就那么有把握中途不发生突发情况吗，做点提前量总是好的。”

### **Netizens' Comments**

Netizen A: "This is so unreasonable, right? Totally inconvenient for people."

Netizen B: "May I ask how is 40-minute determined? 10 minutes are enough for the transfer in some stations!"

Netizen C: "Take the high speed railways around Yangtze river delta for example, even the travel time among many important stations takes only half an hour or an hour, but it takes 40 minutes solely for transfer? "

Netizen D: "15 minutes are enough. You don't need to go outside of the station for transfer. Don't know the purpose of this regulation."

Netizen E: "The station should enhance its efficiency and provide a more convenient transfer service. People should be responsible for their own late arrival. Shouldn't have this one-size-fits-all policy."

### 网友评论

网友 A: “这也太不合理了吧？完全不利民便民。”

网友 B: “请问这四十分钟是怎么计算出来的？有些站点之间的换乘十分钟都够了！”

网友 C: “以长三角区域高铁为例，很多重要站点之间通勤时间全程不过半个小时一个小时，光换乘就要等四十分钟？”

网友 D: “十五分钟就足够了，换乘又不需要出站，不知道这个政策目的是为什么。”

网友 E: “车站应该提高效率，提供更加便捷的换乘服务，谁迟到谁自己负责，而不是这样一刀切。”

### Post 2

[National Radio and Television Administration: Prohibition of broadcast of overseas audiovisual programs during prime time] Today (20th), National Radio and Television Administration issued *Management regulations on overseas personnel participating in Radio and television program production (Consultation Paper)*. Paper proposes that without the approval of the State Council's competent department of radio and television, radio and television broadcasting institutions shall not broadcast overseas audiovisual programs from 19:00 to 22:00. The broadcasting time of overseas movies, TV series, cartoons, documentaries and other overseas TV shows shall not exceed 30% of the total broadcasting time of domestic programs of the same kind. The paper makes it clear that overseas radio and television programs must not contain content that infringes on the legal rights and interests of adolescents, or harms the physical and mental health of adolescents. It is not allowed to introduce or disseminate programs produced by organizations or individuals that engage in activities which damage the dignity, honor and interests of the Chinese nation, endanger social stability, and hurt national feelings.

【广电总局：黄金时间段拟禁播境外视听节目】国家广播电视总局今日（20日）发布关于《境外人员参加广播电视节目制作管理规定（征求意见稿）》。意见稿指出，未经国务院广播电视主管部门批准，广播电视播出机构不得在19:00—22:00播出境外视听节目。广播电视播出机构各频道每天播出的境外电影、电视剧、动画片、纪录片和其他境外电视节目，不得超过当天该类别节目总播出时间的30%。意见稿明确，不得含有侵害未成年人合法权益或者损害未成年人身心健康的（内容）；不得引进、传播从事损害中国国家尊严、荣誉和利益，危害社会稳定，伤害民族感情等活动的境外组织参与制作或有上述行为的个人参加的节目。

### Recommended Comments

Netizen A: "Indeed there are many vulgar overseas programs that have huge impact on teenagers."

Netizen B: "Support. Otherwise everyone is brainwashed by those overseas programs."

Netizen C: "It is necessary to protect domestic programs. It's conducive to the development of domestic show business."

Netizen D: "It's only a prohibition of overseas programs during the prime time, not the whole day. It's nothing unacceptable."

Netizen E: "You can watch overseas programs online if you want. It is reasonable to broadcast our own domestic programs on television."

### 精选评论

网友 A: “确实有很多境外节目内容低俗，对青少年影响很大。”

网友 B: “支持啊，免得大家都被国外这些节目洗脑了。”

网友 C: “对于国产节目的保护还是很有必要的，有助于国内影视行业的发展。”

网友 D: “又不是全天都不允许播出国外的节目，只在黄金时段限制一下，也没什么不可以的。”

网友 E: “想看国外的节目可以自己去网上看啊，在电视上播出自己国家的节目很合理。”

### Netizens' Comments

Netizen A: "Aren't we talking about opening up to the world? But now we are not even allowed to watch overseas programs anymore?"

Netizen B: "If that's the case why don't we just watch *Xinwen lianbo* (CCTV News broadcast) every day(?"

Netizen C: "Not many young people like watching TV in the first place. If so, no one would watch TV anymore."

Netizen D: "So overseas programs like Olympics and World Cup are not allowed to broadcast?"

Netizen E: "Domestic programs are not that good anyway. Why protect them?"

### 网友评论

网友 A: “不是说要对外开放吗？连国外的节目都不允许看了吗？”

网友 B: “这样下去干脆每天都只看新闻联播算了。”

网友 C: “本来年轻人也没多少人喜欢看电视了, 再这样下去根本没有人会看电视了吧?”

网友 D: “那奥运会, 世界杯这样的境外节目, 是不是也不许播了?”

网友 E: “国产节目本来也不好看, 还保护它们干嘛?”

### Post 3

[In future, each game may be subject to a 35% special tax. Board games are regulated first] According to Southern Metropolis Daily, in addition to the control of the total amount of games, there will be a game version number quota system and a game industry special tax in the future, which is similar to the tobacco tax. According to game industry insiders, each game may be subject to a 35% tax. The board games will be regulated first.

【未来每款游戏或将征收 35% 专项税 棋牌类游戏首先被调控】据南方都市报报道, 除了游戏总量控制外, 未来还将有游戏版号配额制和游戏行业专项税, 后者类似于烟草税, 据业内人士, 每款游戏可能将会征收 35% 的税款。而棋牌类游戏将首先被调控。

### Recommended Comments

Netizen A: "Games should be subject to heavy tax like tobacco."

Netizen B: "Nowadays kids and teenagers are addicted to games. It is time to regulate the game industry."

Netizen C: "Game industry has huge profit. It is a good thing to use the taxation to improve people's livelihood."

Netizen D: "Support. It prevents teenagers from being addicted to games and protects the vision and physical and mental health of children."

Netizen E: "Taxing the game industry does not stop you from playing games, but can improve the quality of games and allow really good games to enter the market."

### 精选评论

网友 A: “游戏确实应该像烟草一样, 课以重税。”

网友 B: “现在的小孩和青少年都沉迷游戏了, 是应该对游戏行业进行管制了。”

网友 C: “游戏行业真是暴利行业啊, 拿这些税收的钱去改善民生是好事。”

网友 D: “支持。防止青少年沉迷游戏, 保护孩子们的视力和身心的健康发展。”

网友 E: “对游戏行业收税又不是不让你们玩游戏, 反而可以提高游戏质量, 让真正好的游戏进入市场。”

### Netizens' Comments

Netizen A: "How in lack of money is this? Even taxing the game industry."

Netizen B: "Playing games is my only spiritual sustenance. Now you don't even allow people to play games?"



Netizen C: "That slight decrease in individual tax is now compensated from other places."

Netizen D: "Is there anything that won't be taxed these years?"

Netizen E: "The cost of game development and operation is not low. With this amount of tax, the game industry will be killed."

### 网友评论

网友 A: “这是有多缺钱？连游戏行业都不放过。”

网友 B: “玩玩游戏已经是我唯一的精神寄托了，现在连游戏都要让大家玩不上了吗？”

网友 C: “个税刚降了那么一点，又从其他地方找补回来了。”

网友 D: “这年头还有不收税的地方吗？”

网友 E: “游戏开发运营成本本身就不低，还要加收这么多的税，等于直接杀死了游戏产业了。”

### Post 4

[One month of cooling-off period before divorce may be written into the civil code] Just now, the drafts of each subsection of the Civil Code are submitted for consideration. The draft regarding marriage and family stipulates that within one month from the date of divorce application submission, if any party is unwilling to divorce, he/she may withdraw the divorce application at the marriage registration office. After the expiration of the period, both parties shall apply for the divorce certificate in person at the marriage registration office within one month. For those who do not apply, their application will be withdrawn. According to relevant personnel, the draft adds in a divorce cooling-off period because in practice, due to the simplicity of divorce procedures, the phenomenon of indiscreet divorce has increased, which is not good for family stability.

【一个月离婚冷静期或将写进民法典】刚刚，民法典各分编草案提请审议，草案中有关婚姻家庭编部分中规定：自收到离婚登记申请之日起一个月内，任何一方不愿意离婚的，可以向婚姻登记撤回离婚申请。期满后，双方应当在一个月内亲自到婚姻登记机关申请发给离婚证，未申请的，视为撤回离婚登记申请。据有关人员介绍，草案增加了离婚冷静期的规定，实践中，由于离婚登记手续过于简便，轻率离婚的现象增多，不利于家庭稳定。

### Recommended Comments

Netizen A: "Support this decision. This law is beneficial to family harmony and stability."

Netizen B: "Divorce involves the property of both parties. One month cooling-off period is still necessary."

Netizen C: "If it is the case of domestic violence, even if there is no one month cooling-off period, one party may not agree (to stay in marriage anymore). It is only useful to sue to the court. So (in this case) cooling-off period doesn't apply."

Netizen D: "For those who worry about domestic violence, if that's the case, they won't go through the normal divorce procedure in the first place, but through the court. So that one month period won't exist."

Netizen E: "Cooling-off period only applies to divorce by agreement not divorce by litigation. If there is a domestic violence, they can go through divorce by litigation. It's not relevant to this cooling-off period."

### 精选评论

网友 A: “支持这一决定，这一法律有利于家庭和谐稳定。”

网友 B: “离婚涉及双方财产问题，一个月的冷静期还是很有必要的。”

网友 C: “如果家暴这种情况就算没有一个月冷静期可能有一方也不会同意，只能告上法院才有用，这时候就不存在冷静期了吧。”

网友 D: “那些担心因为家暴的，家暴是诉讼离婚，如果家暴，那第一次也不会是去正常离婚，而是走法院了，不存在那一个月。”

网友 E: “冷静期只适用于协议离婚，不适用于诉讼离婚。如果家暴存在，直接诉讼离婚，跟这个冷静期无关的。”

### Netizens' Comments

Netizen A: "How come two people's relationship has anything to do with you? If they don't want to be together, they can divorce. If they are good, they can get married. How is personal freedom your business? Who can determine if one's family is harmonious and stable or not?"

Netizen B: "Why need a cooling-off period for divorce? If they are already at the civil affairs bureau, how come they haven't thought it through?"

Netizen C: "The most oppressed group in China are women, and women suffer the most from the marriage. Therefore, if one party insist on divorce, then divorce shall be allowed. This is in the interest of women."

Netizen D: "What if one is cheating, gambling, using cold violence, concealing sexual orientation, etc.? Domestic violence is not the only reason for divorce. (This act) is a violation of human rights."

Netizen E: "Where is the freedom of marriage? Freedom of marriage includes freedom of divorce! Isn't increasing the cost of divorce another way of decreasing the marriage rate?"

### 网友评论

网友 A: “俩人过不过跟你有什么关系？不乐意过了就离，俩人好了就结，个人自由用得着你管吗？家庭稳不稳定好不好谁说了算？”

网友 B: “离婚要什么冷静期？都能闹到去民政局办手续的程度了，有几个是没冷静地仔细地考虑过的？”

网友 C: “中国最受压迫的是妇女、婚姻问题上妇女所受痛苦最深, 所以一方坚持要离就可以离, 才符合广大妇女的利益。”

网友 D: “如果因为对方出轨、赌博、冷暴力、隐瞒性取向等等问题呢? 离婚不是只有家暴一个原因的, 这侵犯人权。”

网友 E: “婚姻自由呢? 婚姻自由可包括了离婚自由啊! 提高离婚成本, 这样不是变相降低结婚率吗?”

## Post 5

[Director of the Ministry of Education agrees with "the transfer from university studentship to junior college studentship": Some undergraduates are leading a befuddled life] Public attention has been drawn to an issue that 18 undergraduates in Huazhong University of Science and Technology were demoted to junior college students because of their academic underachievement. Wu Yan, Director of the Higher Education Department of the Ministry of Education agrees: "undergraduates nowadays are leading a a befuddled life, which is certainly not acceptable", he says, "it is appropriate to increase the failure rate of graduating on time, and it is inevitable that there is a certain elimination rate for undergraduates."

【教育部司长肯定“本转专”：有些大学生醉生梦死】华中科技大学 18 人因学分不达标本科转专科，引发关注。教育部高教司司长吴岩给予肯定：“现在大学里，有些学生醉生梦死，这样是不行的。”吴岩表示，“适度增加学生不能按时毕业是应该的，本科生有一定的淘汰率也是必然。”

## Recommended Comments

Netizen A: "It's a good thing. Too many students are muddling along."

Netizen B: "It helps students to treat their study seriously. Nowadays many graduates' performances do not match with their university diplomas."

Netizen C: "Only in this way can the quality of education and the quality of graduates be guaranteed."

Netizen D: "(Undergraduates) should have been strictly disciplined earlier. College students now do nothing but eat, drink and play."

Netizen E: "College students should study hard at colleges. Agree with easy-way-in and hard-way-out. Otherwise, it is a waste of educational resources and parents' money."

## 精选评论

网友 A: “好事情，混日子的学生太多了。”

网友 B: “有助于学生好好对待学业，现在大学生拿着文凭却没有本科水平。”

网友 C: “这样才能保证教育质量和毕业生的质量。”

网友 D: “早都该严格管教了。现在的大学生除了吃喝玩乐什么也不会。”

网友 E: “大学生在校就应该认真学习，赞同宽进严出。不然是浪费了教育资源和父母的钱。”

### **Netizens' Comments**

Netizen A: "What about those teachers who muddle through class hours and don't take teaching seriously?"

Netizen B: "Nowadays many university lecturers don't teach seriously but do their side business really well. Their minds are completely not in teaching. Why not regulate them?"

Netizen C: "This is downplaying junior colleges. Universities and junior colleges share different training styles. In many cases, junior colleges are better at fostering technical personnel."

Netizen D: "How about a transfer from professor to assistant (professor)? I am a law school student, and we have a professor who owns a law firm and only gives us three lectures out of sixteen required lectures."

Netizen E: "Actually I think the transfer also applies to teachers. Some teachers in universities don't teach seriously but talk absurdly. They are irresponsible."

### **网友评论**

网友 A: “那混课时的老师，不把教学当一回事的老师又该怎么处理？”

网友 B: “现在很多大学老师上课不好好教，副业却做得风生水起，心思完全不在教学上，这怎么不管管？”

网友 C: “这样是贬低专科。专科和本科是不同的培养思路，很多情况下，专科更善于培养技术人员。”

网友 D: “要不也来个‘教转助’（教授转助教）？本人法学生，我们有个老师开了律师事务所，总共十六节课的课程他给我们上了三节课。”

网友 E: “其实我觉得老师也应该转，一些大学老师上课不讲课净是乱讲，一点也不负责任。”

## **Appendix 3: Weibo Posts and Comments**

### **Traditional Chinese Medicine Policy**

[In recent years, the financial investment in traditional Chinese medicine has been continuously increased throughout the country] In recent years, provinces like Hebei, Shanxi, Heilongjiang, Fujian, and Sichuan invested a total amount of 648.85 million RMB in the development of and the inheritance of traditional Chinese medicine, including building 166 traditional Chinese medicine hospitals. According to the Dean of Beijing Traditional Chinese Medicine Hospital, the hospital has cured 10 people since the outbreak happened in the Xinfadi wholesale market. Among 10 people, 7 people are treated mainly through traditional Chinese medicine.

【近年来，全国各地不断加大对中医药的财政投入】近年来，河北、山西、黑龙江、福建、四川等多个省份共投入 6 亿 4885 万专项资金支持中医药强省建设及中医药传承发展，包括修建了 166 个中医馆。北京中医医院院长介绍，在本次新发地批发市场发生聚集性疫情发生以来，北京累计治愈出院 10 例。出院 10 名病例中，有 7 名以中医治疗为主。

### ***Traditional Chinese medicine policy emotionally-agreeing comments***

1. Traditional Chinese medicine is the number one science in the world.  
1. 中医是世界第一科学。
  
2. For those who disagree with traditional Chinese medicine, if there is no difference between traditional Chinese medicine and water, if both can cure the disease, then why our cure rate is higher than the cure rate in the United States ... If water can cure the disease, then American people should just drink water ...  
2. 反对中医的可以想一下，中医要是跟喝水没啥区别，都能好，那为啥治愈率比美国大...如果喝水就能好，让美国人喝水就行...
  
3. I bet the haters of traditional Chinese medicine will show up soon.  
3. 目测中医的无脑黑还有三秒到达战场
  
4. Traditional Chinese medicine is great.  
4. 中医厉害
  
5. Traditional Chinese medicine is awesome.  
5. 中医绝了
  
6. Speak with the facts that traditional Chinese medicine is powerful.  
6. 用事实说话，中医强
  
7. If it wasn't for traditional Chinese medicine, (China) will become the U.S. now. Traditional Chinese medicine is great.

7. 没有中医，现在就是美国，中医伟大
8. Basically no one who hates traditional Chinese medicine understands medical science ...  
8. 黑中医的基本没有一个懂医学的...
9. Haters of traditional Chinese medicine always criticize others for arbitrarily listening to and believing in experts, but they are actually people who cannot think independently. They regard the statements posted by some so-called scientific bloggers as truths.  
9. 中医黑一直抨击别人随意听信专家说法，其实他们才是最没有独立思考的人，抱着几个所谓科学的号发表的一些言论，奉为真理。
10. Haters of traditional Chinese medicine don't care about this. They think the data from China are all fake, and American disinfectant is the best treatment.  
10. 中医黑不管这个，中国的数据都是骗人的，美国消毒剂才是最牛的
11. The things passed down by the ancestors for thousands of years are definitely good, but some people don't want to admit that and have been bad-mouthing traditional Chinese medicine all the time.  
11. 老祖宗流传几千年的东西肯定是好的，就是有些人不愿意承认还一直黑
12. Haters of traditional Chinese medicine are going to be annoyed.  
12. 中医黑它又要开始跳脚了
13. I am so proud to be a traditional Chinese medicine practitioner.  
13. 身为中医人我很自豪
14. After all these years of waiting, the flourishing moment for traditional Chinese medicine has finally come. Come on!  
14. 中医这么多年了终于到了发扬光大的时候了加油！
15. Many traditional Chinese medicine universities in China are 985 and 211(High-ranking universities). Are you saying there is no need for them to exist? Most of the haters in the commentary section probably have never been to school or they are low-educated people.  
15. 国内的很多中医药大学清一色 985、211，这样说这些学校也没有存在的必要了？评论区的中医黑大部分可能都是没读过书或者是低学历人群。
16. Haters of traditional Chinese medicine are coming again.  
16. 中医黑又要来了
17. Traditional Chinese medicine is the first choice of treating COVID-19!  
17. 中医是治疗新冠肺炎的首选！
18. Haters of traditional Chinese medicine went to inject disinfectants collectively.  
18. 中医黑集体去注射消毒水了

19. I don't know why there are people who would bad-mouth traditional Chinese medicine ... Other countries are scrambling to say that traditional Chinese medicine belongs to them. But it's ridiculous that there are people in our country who don't acknowledge traditional Chinese medicine ...

19. 搞不懂为什么会有人黑中医...不管中医西医不都是治病救人的吗...别的国家还抢着说中医是他们的呢，我们国家居然还有不承认中医的...

20. SARS was defeated by traditional Chinese medicine as well. Western medicine has strong side-effect and has harmed many people. What can western medicine do?

20. 非典那年也是中医治疗好的，用西医治疗的都有强烈副作用还害了不少人，西医能干啥？

21. Traditional Chinese medicine is the power of China.

21. 中医是中国力量

22. Haters of traditional Chinese medicine are selectively blind.

22. 中医黑选择性失明

23. Those who claim that traditional Chinese medicine is 'a tax for stupid people' have not studied traditional Chinese medicine carefully at all! To slander things you don't even understand, whose fault it is?

23. 鼓吹中医无效是智商税的人，压根没有好好去研究过中医！对于自己根本不了解的东西，却大肆诋毁，到底是谁的错呢？

24. Pass down traditional Chinese medicine. We can't let our ancestors' efforts go in vain.

24. 传承中医，老祖宗的辛苦我们一定不能输

25. Western medicine cannot be comparable to the wisdom passed down from our ancestors.

25. 老祖宗留下来的智慧岂是西医能比的

26. The heritage from our ancestors is useful.

26. 老祖宗留下来的东西，管用。

27. Haters of traditional Chinese medicine cannot accept this. They are going to be uncomfortable soon.

27. 中医黑看不得这个，又该如坐针毡了！

28. Haters of traditional Chinese medicine be like: I can't see it; It's impossible; I don't buy it; I don't believe it; They are self-cured.

28. 中医黑粉：看不到，不可能，骗人的，我不信，自愈的。

29. Traditional Chinese medicine is the quintessence of Chinese culture ~ Five-thousand-year Chinese culture is very powerful.

29. 中医是中华民族的国粹~中华民族五千年的文化是很厉害的~

30. Traditional Chinese medicine keeps fighting.

30. 中医继续加油

### *Traditional Chinese medicine policy analytically-agreeing comments*

1. Both traditional Chinese medicine and western medicine have their own advantages. Some diseases need treatments from traditional Chinese medicine. Some people only take traditional Chinese medicines for a few days and dare to blame traditional Chinese medicine for its ineffectiveness. Besides, to receive proper treatment of traditional Chinese medicine you need to choose proper the hospital and the proper doctor. After all traditional Chinese medicine is hard to learn and there are few outstanding doctors.

1. 中医西医各有各的好啊，有些疾病就是要靠中医慢慢调理的，有些人中药就吃个几天，然后没效果就怪中药不好，而且看中医要选靠谱的医院和医生，毕竟中医难学，优秀的医生少

2. Traditional Chinese medicine treats people discriminately with targeted medicines. It's not like how western medicine develops new drugs, so there is no control group. As for the effectiveness of western medicine, the comparison has already been made for curing SARS, and traditional Chinese medicine won big time. So this time our country is promoting traditional Chinese medicine.

2. 中医是辩证施治，组方用药，又不是西医研制新药，没有对照组一说。至于中西医疗效，SARS 的时候已经对比过，中医完胜，所以这次国家很快推广中医

3. The long existence of traditional Chinese medicine has proven its effectiveness. In terms of the curative effect, Western medicine cannot compete with traditional Chinese medicine in many aspects. Nowadays the haters of traditional Chinese medicine viciously bad-mouth traditional Chinese medicine with different purposes. As Chinese, it is our duty to inherit and develop traditional culture. There is no conflict between western medicine and traditional Chinese medicine. The treatment would be significantly better if you combine these two.

3. 中医存在这么久了，当然是有用的，很多方面的疗效，西医无法比拟。现在各种中医黑为了达到他们的目的，各怀鬼胎、穷凶极恶、手段卑劣地黑中医，图谋不轨。作为中国人，传承中华文化并且发扬光大是责任，中西医并不冲突，结合中西医治疗，疗效更为显著。

4. These haters of traditional Chinese medicine bad-mouth traditional Chinese medicine all the time and brag about western medicine all the time. They seem to know biomedicines very well but actually, they know nothing. Most of them are just following the trend. In their eyes, traditional Chinese medicine is not allowed to develop and cannot represent modern medicine. Are things static?

4. 这些中医黑们见中医药就黑，见西药就捧，别看他们跟多懂生物医药似的，其实充满了无知和愚昧，其中大部分人都是跟风黑的，在他们眼里中医药是不允许发展的，也不允许应用现代科学，难道事物是静止的吗？



5. Some people have misunderstandings of traditional Chinese medicine. Traditional Chinese medicine emphasizes individualization and personalized treatment. Western medicine is disease-oriented but traditional Chinese medicine considers all kinds of situations and gives treatments accordingly. Western medicine is the standardized treatment that needs a control group. It belongs to a different system. You can't use a western medicine mindset to justify traditional Chinese medicine.

5. 有人对中医有误解。中医极其强调个体化，个性化治疗，西医诊断的是一种病，而中医可能认为有各种不同的情况需要辨证才论治。西医是标准化治疗，可以设对照组，是不同的体系，不能用西医的思维方式来论中医

6. Some people do not acknowledge traditional Chinese medicine. But no one says traditional Chinese medicine can cure all diseases. Western medicine cannot compare with traditional Chinese medicine in adjusting the human body. Even for the COVID-19, it is the immune system that is fighting the virus. Traditional Chinese medicine can strengthen the immune system to some extent. Don't forget that human beings are part of nature.

6. 有一些人不认可中医。可是人家又没说中医包治百病。中医在调节体质上不是西医可以比的。就是新冠也是免疫系统在打败病毒。中药在一定程度上可以增强免疫系统。不要忘了人是自然的一部分。

7. Once again I will emphasize that why not use the combination of traditional Chinese medicine and western medicine if it works well? There is no need to say one is good and the other one is bad. People's personal condition varies. Those whose illness is clearly diagnosed can be treated by western medicine. For those whose illness is not due to the failure of any particular physiological mechanism, they should be treated by traditional Chinese medicine holistically as it can coordinate different aspects of the human body. And for those with serious illness, their life support should be based on the treatment of western medicine.

7. 再次强调中西医结合，有用为何不用，不需要捧一踩一，人各有异，针对于病因非常明确细化的可以用西医专攻，那些病因不单一或者无法细化到某一生理机制上的用中药治疗有整体性的效果，协调机体各方面，然后那些重症的生命支持治疗措施还是需要西医的

8. Some drugs of modern medicine are extractions of Traditional Chinese Medicine as well. Western nutrition products are made by extractions of plants, very much like supplements and nutrition of traditional Chinese medicine. Traditional Chinese medicine relies on the method of "look, listen, question, and feel the pulse", and western medicine also needs to know your apparent symptoms and state of the illness. The anatomy of western medicine was well documented in the early traditional Chinese medicine literature. Both traditional Chinese medicine and western medicine have their own edges.

8. 现代医学应该也有些药是提取中药成分，西方的保健品也通过提取植物的精华做成的相当于中医的中药和食补。中药主要靠望闻问切，西医也需要通过你的外在表现和听诊器知道病情。西医的解剖...说实话中医很早就有记载。两边其实都有相似又各有所长吧

9. Chinese patent medicine is made by the raw materials of traditional Chinese medicine and according to the traditional Chinese medicine theories for preventing and curing diseases. It is made according to the specified prescriptions and technology. It is under the supervision of and approval of the national medical products administration of China. Therefore, it has the medicine's name, recommended dosage, quality standard, and test method for clinical use.

9. 成药是以中药材为原料，在中医药理论的指导下为了预防及治疗疾病的需要，按规定的处方和制作工艺将其加工制成一定剂型的中药制品。是经国家药品监督管理部门批准的商品化的中药制剂。因此作为供临床应用的中成药，要具备相应的药名、用法用量、规格和特定的质量标准以及检验方法。

10. To cure the disease is the ultimate purpose. We should acknowledge whichever medicine works. When we talk about traditional Chinese medicine, we are not talking about the traditional way of making drugs, like climbing up to the mountains to harvest herbs. Don't you know traditional Chinese medicine also requires experiments and research? Please don't say traditional Chinese medicine is close-minded with a prejudiced standpoint.

10. 能治病是最终目的，谁能治好肯定谁。现在说“中医”也不是专门指古代上山采药，回来古法炮制等古代方法了吧？中医就不试验？就不研究？不要一上来就立场说中医是故步自封。

11. After thousands of years of practice in traditional Chinese medicine, if there is a problem, it will be abandoned long ago. However, it can still survive after thousands of years and hundreds of generations. I am not saying it's completely right, but at least it has some value!

11. 中医经过几千年实践有问题的话早就会被摒弃掉了，历经几千年几百代人验证都还能够存留下来的，不说完全是对的，至少也可以肯定它是有可取之处的吧！

12. Both modern medicine and traditional Chinese medicine have limitations. The treatment for COVID-19 has no empirical evidence so far from modern medicine. So there is a chance for traditional Chinese medicine to try on its treatment and turns out the treatment is effective. Traditional Chinese medicine and modern medicine are concordant and one must know this critically. To cure patients and reduce the pain for patients are the essence. Why bad-mouth each other?

12. 现代医学中医等都是有限性的，新冠治疗在没有现代医药基础上让中医试试看才发现中医也是有疗效的。这即打脸中医黑又打脸现代医学黑。传统与现代医学本身就是统一的，辩证看问题。把病人治疗好减少痛苦才是医学的本质嘛，为什么要互黑呢？

13. There are problems that can or cannot be solved by western medicine, and there are problems that can and cannot be solved by traditional Chinese medicine. Traditional Chinese medicine and western medicine are complementary, not contradictory, and are compatible, not paradoxical.

13. 有西医能解决的问题，也有西医解决不了的问题；有中医能解决的问题，也有中医解决不了的问题。中西医是互补而不是对立的，是兼容而不是冲突的。

14. It's meaningless to blindly deny traditional Chinese medicine. It's not like it can cure every disease ... many times there should be a treatment combined with traditional Chinese

medicine and western medicine ... Traditional Chinese medicine does work in many aspects.

14. 一味的否定中医真没意思。又没说中医可以包治百病...其实很多时间就是应该中西结合...中医在很多方面确实管用

15. First, there is a clear distinction between traditional Chinese medicine and western medicine, which means traditional Chinese medicine is in an awkward position that needs our government to advocate for it; second, we dare to use traditional Chinese medicine and it works well, and that means traditional Chinese medicine still survives; finally, there is no universal prescription being published so far, that means traditional Chinese medicine's prescription is individual-based and cannot be generalized to the general public, so there is still a long way to go. Finally, I hope that traditional Chinese medicine and western medicine can complement each other and develop together so there will be no need to distinguish these two.

15. 首先是强分中西医，说明中医处境尴尬，需要政府发声；其次敢用中医且有效，说明老祖宗的手艺没失传，中医没死；最后是未能公布具体普世经方，说明中医还是一人一方，不能做到大面积普及，未来仍然道长且阻。最后期待中医西医相互取长补短，与时俱进，也就没必要分什么中西了。

16. Those who bad-mouth traditional Chinese medicine regard traditional Chinese medicine with a western medicine mindset. Traditional Chinese medicine has its own characteristics. It's normal that it treats the same disease with different methods and different diseases with the same method. However, this cannot be understood by western medicine. But it's also wrong to exaggerate the effectiveness of traditional Chinese medicine.

16. 黑中医的一直在拿西医的思维方式来看中医，中医有自己的特点，同病异治，异病同治，在中医中很正常，而西医无法解读！但过度夸大中医的效果也是错误的！

17. This world is not just black and white. Traditional Chinese medicine that has been used for thousands of years definitely works, but it's not omnipotent. You cannot say traditional Chinese medicine is useful just because some of the drugs are useful, and you cannot say it is useless just because it cannot cure all diseases. Traditional Chinese medicine and western medicine are not opposed to each other. They should be used jointly. Excluding anyone of them will only make you closed-minded. This applies to the whole medical field.

17. 这个世界没有非黑即白。吃了几千年的药肯定是有用的，但他不是万能的。不能因为部分药方有效就说全部中药都有用，也不能因为部分疾病治不了就说中药无用。中西医不是对立的，而应该结合起来使用，排除异己只会变的狭隘。医药领域也是一样的。

18. I always admit the limitations of traditional Chinese medicine, but it is effective for treating some diseases, and it's not entirely the placebo as believed by the haters. Traditional Chinese medicine needs to develop a more rigorous and scientific system and needs to improve the safety and effectiveness of the medicine by doing more experiments. In addition, the combination of traditional Chinese medicine and western medicine is quite good. A cat is a good cat as long as it catches the mouse. When I go see the doctor, I first get my body examined, and then listen to the doctor's treatment plan, and be treated accordingly. When to use traditional Chinese medicine and when to use western medicine depends on which one

can offer the best treatment.

18. 一直承认中医的局限性，但对于部分病症来说中医的确是有效的，并非中医黑说的安慰剂。中医需要建立更严谨、科学的体系，通过更多实验增加安全性和有效性。还有，中西医结合挺好，抓住老鼠就是好猫。自己看病向来是检查化验确诊后，听医生的诊疗方案。该怎么治能怎么治、何时西医何时中医，取其利就好。

19. Both traditional Chinese medicine and western medicine are meant for curing patients. They are just good at different domains. Regardless of white cats or black cats, as long as they can catch the mouse, they are good cats. Should treat both traditional Chinese medicine and western medicine rationally and equally, and both should learn from each other, and coexist harmoniously.

19. 中医西医一样都是为治病救人产生的，仅仅是某些领域侧重不同而已，不管白猫黑猫，抓到老鼠就是好猫，平等理性对待，互相借鉴，和谐共存

20. There is some good stuff in traditional Chinese medicine. Should take the essence of it and remove the dross of it. Should not completely deny it.

20. 中医里也有好东西啊，取其精华去其糟粕，不要一棒子打死。

21. Almost all virus infections are self-cured by immunity. But many drugs can improve and adjust immunity. Many traditional Chinese medicines are in fact used for adjusting immunity. They are quite good and are good at alleviating the symptoms.

21. 几乎所有病毒感染，最后都是靠抵抗力自愈。但很多药物是可以增强和调节免疫力的。很多中药其实就是调节免疫力的复方药，挺好的，哪怕能减轻症状也是好的。

22. Western medicine nowadays is technically modern medicine. There used to be many absurd treatment methods as well upon the birth of western medicine. Traditional Chinese medicine has been passed down for thousands of years in our country. We should let traditional Chinese medicine go down the path of scientific development rather than criticize it blindly. We should take its essence and remove its dross so that Chinese medicine can also be rejuvenated with stronger vitality.

22. 现在的人们所说的西医，准确地说法应该是现代医学。在西医诞生之初，也有很多现在看似荒谬可笑的行医手段。我们的国家有传承数千年的传统医学，我们应该让中医也走上科学发展的道路，而不应该是一味抨击它。取其精华，去其糟粕，让中医也能焕发更强的生命力。

23. Traditional Chinese medicine relies on thousands of years of practice. It will be difficult for it to innovate for a long time in the future. Western medicine is different. It'd be easier to understand that western medicine breaks things into chemical elements, and you can add whatever you feel is missing into those chemical elements. I have seen a saying that traditional Chinese medicine nurtures the human body, and gives people the strength to fight the illness.

23. 中医依靠的是几千年来无数人的实践尝试，未来很长一段时间难有创新了，西医不一样，把所有的东西拆成一个个化学因素，觉得缺什么就加什么，会好理解一些。看过一句话，中医是扶植人体，给人力量去和病痛对抗。

24. Our technology isn't that advanced. We can't explain many things. But the real-life examples prove that traditional Chinese medicine is useful. At least it won't worsen patients' condition.

24. 我们的科技真的没那么发达，有好多事都不知道为什么，但实例说明中医还是有用的，起码不会加重。

25. The misunderstanding of traditional Chinese medicine is that it shares different medical principles with western medicine. If you understand traditional Chinese medicine from the perspectives of physics and chemistry of western medicine, there will be a cognitive bias and no solution. Traditional Chinese medicine understands the characteristics and pathological phenomena of the human body based on classic Chinese philosophy. It's rational and effective.

25. 对中医认识误区在于中、西医的不同医理，如果从西医的物理、化学角度去认识中医，是存在认知偏差且无解的；中医依托中华古典哲学思维方法，从人的整体性特征理解人体的生理、病理现象，思之有理，用之有效。

26. Traditional Chinese medicine is an inheritance.

26. 中医是传承下来的

27. At the beginning of the founding of China, traditional Chinese medicine helped us solve many problems of lacking proper medications. Except for other social factors, traditional Chinese medicine helped increase the average life span. Can you deny the effects of traditional Chinese medicine?

27. 在建国初期，是依靠中医的卫生方针帮助我们的前辈们解决了缺医少药的困境啊，人均寿命的最初增长除了社会等方面的因素，你们能否认中医药的作用？

28. It says the patients were treated mainly, not solely, by traditional Chinese medicine. You guys should stop arguing. The combination of traditional Chinese medicine and western medicine is the best. Traditional Chinese medicine has its own advantages and western medicine has its own advantages. No one is better than the other. They both contribute to human health. There is no number one, but they complement each other.

28. 是中医治疗为主，不是全部，大家不要再抬杠了，所以中西医结合最好！中医有中医的好，西医有西医的好，没有谁最好。为人类医疗做贡献就是好的。相辅相成没有第一。

29. Both traditional Chinese medicine and western medicine have had their downsides while developing, but both have contributed to the world's medical development.

29. 中西医在发展过程中都有过不好的一面，但同时也都为世界医药事业发展作出了贡献

30. The core of traditional Chinese medicine is dialectics, which combines the diagnosis of symptoms and the diagnosis of diseases together. Different symptoms can appear at different stages amid the development of COVID-19, and different people can show different

symptoms. Therefore, the treatments can be different according to different symptoms.

30. 中医是辨证论治为核心，辩证和辨病相结合。新冠肺炎病情发展的阶段可出现不同的证，每个人体质的差异也可能表现不同的证。所以证不同，治疗用药也有不同。

### ***Traditional Chinese medicine policy emotionally-disagreeing comments***

1. Traditional Chinese medicine won't tell you the prescription, won't give you the formula, just allows you to follow your feelings. If the patient is cured, then that's traditional Chinese medicine's credit; if the patient is dead, that's western medicine's fault. Traditional Chinese medicine wants to piss off western medicine.

1. 中医就不告诉你秘方，就不给你公式，就是跟着感觉走，好了中医的功劳，死了西医的罪过，就是要气死西医。

2. Traditional Chinese medicine is an imposter, holding a post without qualifications. It won't work when it comes to something real. That's why there is no traditional Chinese medicine in the emergency room. Traditional Chinese medicine cannot survive in a place where you need actual skills.

2. 中医就是南郭先生，滥竽充数，来真的就全都不行了，这就是急诊科为什么没有中医的原因，凭本事救人地方中医混不了。

3. I recommend drinking water as a treatment method. May be better than traditional Chinese medicine.

3. 建议喝水治疗都比中医好

4. COVID-19 is a kind of self-cured disease. People will recover even without any medications. Don't blindly support traditional Chinese medicine!

4. 自愈性疾病，不吃药也能好！别舔中医了！

5. It gives me chills just to think about the interests behind the industrial chain of traditional Chinese medicine. I don't have the guts to think about how big the chain could be.

5. 一直觉得中医背后的产业链细思恐极，到底上到什么层次不敢想。

6. I have the guts to not use traditional Chinese medicine all my life, but do you have the guts to not use western medicine all your life?

6. 我敢一辈子不看中医，你敢一辈子不看西医嘛？

7. Ok, looks like those seven recovered patients are mild cases. They can be cured by water as well.

7. 哦，看来治愈那七个属于轻症，喝喝白开水也可以好

8. Traditional Chinese medicine is becoming more and more fake right now. Actually, it is western medicine that is effective. This is a fact.

8. 现在中医越来越假了，其实医治还是西医有效，这个是事实。

9. If traditional Chinese medicine is truly effective then it should provide the data from double-blind experiments. If you cannot even do double-blind experiments, then every time you say traditional Chinese medicine is effective, it's western medicine that is actually working.

9. 中医要是真有效果就拿出基本的双盲实验数据出来说话，连双盲数据都不敢做的，哪次说中药有效的时候，没有西药在一旁伺候着？

10. It's a disease that relies on self-cure but you have to say it's traditional Chinese medicine's credit.

10. 基本靠自愈的病非得往中医上贴

11. It's already 2020 now but all you can say is "ancestors". Feudal thoughts! Medical science concerns patients' life and health, which are the basis of human lives. However, you are here trying to muddle through!

11. 都2020年了，还“祖传”挂嘴边，腐臭！医疗领域事事牵涉患者的生命和健康，生命和健康是人活着的基本，和稀泥呢在这！

12. Traditional Chinese medicine treatment? I'd say it's drinking water treatment.

12. 中医疗法？我还说喝水疗法呢

13. Based on my personal experience, traditional Chinese medicine does not work as it gives different patients different medications. Elders in my family truly believe in traditional Chinese medicine, but it turns out to be useless for them after seeing seven to eight doctors.

13. 中药基本不管用，亲身经历，不同病人不同症状开同种药，家里老人还信的不行，看了七八个中医啥用没有。

14. Traditional Chinese medicine is being ridiculous if it has no control group.

14. 中医没有对照组就是要流氓

15. What if patients can self-cure without any treatment?

15. 如果不治疗就能痊愈呢？

16. You supporters of traditional Chinese medicine only have this little ability that you don't even dare to acknowledge the effectiveness of modern medicine? I can guarantee that I won't use any traditional Chinese medicine, but can you guarantee that you and your family won't use modern medicine? So no surgery, no injection, and just some herb for treatment.

16. 你们中医粉就这点能力，连正视现代医学的功效都不敢了？我可以保证自己不用中药，你敢保证你的家人和你不碰现代医学吗？不做手术不输液不打针就光靠喝点汤药治病呗。

17. Can feeling the pulse diagnose COVID-19?

17. 难道把脉可以诊断冠状病毒吗？

18. Why conduct nucleic acid testing when you can just "look, listen, question, and feel the

pulse"?

18. 还测什么核酸，望闻问切不就行了！

19. The fruits of modern medicine are stolen by traditional Chinese medicine.

19. 现代医学的成果被中医窃取了

20. Traditional Chinese medicine is all business.

20. 中医都是生意

21. If a disease can be cured by traditional Chinese medicine then it can be cured without any medicine as well.

21. 凡是用中药能治好的病都能自愈

22. Traditional Chinese medicine plays itself to death.

22. 中医都是自己把自己玩死的

23. 10 patients ate Chinese food. Chinese food works!

23. 10 名都以吃中餐为主，食疗，成了！

24. I dare traditional Chinese medicine to conduct nucleic acid testing.

24. 中医有本事来个核酸检测吧

25. All 10 patients drank water. I guess you can also say water's cure rate is a hundred percent.

25. 10 病例中 10 名都喝了白开水。也可以说白开水总有效率百分之百

26. Please be a good person and tell people around you that if they are sick, taking traditional Chinese medicine will only result in placebo effects and has no treatment effects! It can even be harmful.

26. 做个好人吧，请告诉你身边的人，人病了，看中医吃中药只是安慰作用，对治疗没有丝毫作用！反而有害。

27. Apparently you have used modern medicine treatment methods but you only give credits to traditional Chinese medicine.

27. 明明用了现代医学的手段，偏说是中医的功劳

28. Traditional Chinese medicine is a liar and those who believe in traditional Chinese medicine are fools!

28. 中医是骗子，信中医的都是傻子！

29. Tell me what operating tables are used for? To look, listen, question, and feel the pulse, or to massage the blood vessels? They are used by western medicine. Traditional Chinese medicine is ancient medicine but it turns to modern medicine now? After all these years, can you name one technology developed by traditional Chinese medicine that is applied by



western medicine? Go search yourself about the equipment of traditional Chinese medicine and you will see how ridiculous they can be. By the way, you can buy yourself one of those herb cooking machines if you like.

29. 你告诉我手术台中医拿来干嘛？望闻问切还是按摩血脉么？明明就是西医用的，中医就是古代医学，摇身一变都叫现代医学了？这么多年了，中医发明什么科技设备了让西医用去了，你说一个？自己去百度中医设备，打打自己的脸，顺便给自己买一个煎药机。

30. Does traditional Chinese medicine recognize COVID-19?

30. 中医认识新冠不？

### ***Traditional Chinese medicine policy analytically-disagreeing comments***

1. 1. Traditional Chinese medicine with a scientific basis is acceptable. However, most of the concepts of traditional Chinese medicine have no scientific basis. 2. Western medicine has sufficient scientific practices, although the subjects of those practices are clinical patients. 3. Biology, chemistry, medical science are all called modern science.

1. 1.有科学依据的中医是被人认可的，但目前绝大多数中医理念是没有科学依据的。2. 西医是有十分充足的科学实践的，尽管实践对象是临床病人。3.生物学，化学，医学等等，统称为现代科学。

2. This is not the difference between traditional Chinese medicine and western medicine, but modern medicine and traditional medicine. The ancient west used to have bloodletting treatments that had long been abandoned. I always consider traditional Chinese medicine as an experiential science because its theories cannot be proven based on modern scientific standards which require experiments. So it's not convincing.

2. 这不是中医和西医的区别，这是现代医学和传统医学的区别，西方古代也有早已被放弃的放血疗法等。我一直觉得中医是一门经验学，因其理论没办法按照现代科学标准进行实验求证所以很难说服。

3. I don't agree with blindly worshipping traditional Chinese medicine and it's not about whether it belongs to China or not. I didn't mention a word about western medicine. There are only traditional medicine and modern medicine in my eyes. Most of the so-called thousands of years of Inheritance is just dross. If you want to argue with me, please look at those medical skills that have been passed down first. The essential parts of traditional medicine need to be proven by modern science.

3. 我反对的就是盲目崇拜中医，这跟中国不中国无关，我半句没提过西医，我眼中只有传统医学和现代医学。什么几千年传承之类，大部分是糟粕，要是想反驳，看过那些传承下来的医术再说。传统医学的精华部分，需要现代科学来验证。

4. From a perspective of statistics, there is no statistical data to support traditional Chinese medicine. It cannot pass the double-blind experiment, and it has no standardization and quality control.

4. 从统计学的角度，中医药没有统计学做数据支持，过不了双盲，没有标准化和质量

控制

5. The technology of traditional Chinese medicine cannot be duplicated, has no unified standard, and the treatment of which depends on different doctors and patients. This is the main reason why it is being criticized by people. There are too few good traditional Chinese medicine practitioners and too many fake doctors. Before the 1950s, the improvement in human life span was not significant until the import of western medicine. Especially drugs like penicillin have greatly extended the life span of Chinese people. This is an undeniable fact.

5. 中医技术无法复制，沒有统一标准，要因大夫和病人而异，这是被人诟病的主因。传统好中医太少，游医骗人，上世纪 50 年代前对人类寿命的提高不明显。西医的进入，尤其青霉素等药物的普及，使国人寿命大幅度延长。这也是不争的事实

6. There is no such thing as 'tradition' in western medicine, it's just one of many phases amid the development of western medicine. Once technical advancements are being made, outdated diagnosis and treatment options with large side effects will be eliminated. It is worthy of respect that even if a diagnosis or a treatment method is eliminated in the western medical system, there will be a rigorous outsider assessment of it with a clinical evaluation of it. The traditional Chinese medicine system can't even evaluate the pros and cons of its own doctors' current treatments. This is why it's being criticized.

6. 西医就不存在“传统”一说，那只是西医在发展过程中的一个阶段，一但有了技术层面的推进，陈腐的副作用大的诊断和治疗方案就会淘汰，值得尊重的是，西医体系即便淘汰一个诊断或者治疗手段，都会做严谨的体外评价然后结合临床评价，中医体系连评价自己中医师的现阶段治疗优劣都做不到，这是它招骂的原因。

7. I am not bad-mouthing about traditional Chinese medicine. I am just expressing my skepticism. Such skepticism comes from the treatment in which traditional Chinese medicine uses bat feces to cure eye diseases just because ancient doctors do not know the ultrasonic wave and believe that bats can see in the dark is because bats have good vision. One needs to seek truths from facts. Compared with the experience accumulated by blindly testing drugs, I'd rather believe in science that is justified and well-founded. In fact, I am not questioning traditional Chinese medicine, but I am just believing in science.

7. 我也没有黑中医，我只是保持我自己的怀疑态度，这种怀疑态度来源于中医用蝙蝠屎来治疗眼疾，只是因为古人不懂超声波认为蝙蝠在黑暗中能看清是因为蝙蝠视力很好，要实事求是，与靠试药积累的经验相比，我更愿意相信有理有据的科学，说白了根本上我并不是质疑中医，只是我相信科学

8. Modern medicine is the only direction of the development of traditional Chinese medicine. It should rely on scientific equipment to diagnose, use extractions to find single elements, and not feed people with mixed-up herbs. Finding the artemisinin is a good example. Modern science has proven that 99% of the theory of mutual restraint between food is bullshit.

8. 中医需要发展，发展的方向就是现代医学，靠科学仪器来确诊，用提纯来找出起作用的单物质，而不是十种八种草药搞一起让人吃，就像青蒿素一样，科学已经证明所谓的相克 99%都是瞎说。

9. I hope traditional Chinese medicine works. But this kind of data proves nothing and cannot tell what element is actually working. The large sample double-blind experiment in medical science is refused by many people who claim traditional Chinese medicine is effective. Modern medicine needs such experiment but why traditional Chinese medicine avoids it?

9. 我希望中医有效，但是这种数据，没有说服力，证明不了到底是什么东西在起作用，医学里有大样本双盲试验，这是大部分声称有效的中药所拒绝的，现代医学都需要那个来证明他的疗效，为啥中药在逃避？

10. Traditional Chinese medicine is not accurate science and is hard to be duplicated. It mainly relies on the experience of sophisticated doctors, which is too subjective. Traditional Chinese medicines have many side effects and are easily abused.

10. 中医并不是精确的科学，难以有效的复制，主要还是看老中医的经验，这太主观了，中药副作用比较多，也容易被滥用。

11. You have to see things from a holistic angle to understand the essence. Please know about the mechanism of pneumonia, know about why serious illness would kill people and the inflammatory storm of the immune system. After knowing these essences, please think about the pharmacology of traditional Chinese medicine which cannot even clearly define any material composition, and you will deeply understand why in today's society where natural science is so advanced, the existence of traditional Chinese medicine can be so ridiculous.

11. 只有全维度都明确才能最客观看清本质，了解下肺炎机理，了解下病人重症致死的根本道理，免疫系统的炎症风暴，知道本质再去想想中医那些药理机制，物质成分都不明确的东西，就会深刻理解在自然科学如此发达的今天，中医的存在是多么的不可思议。

12. You all carry a strong sense of national pride. If traditional Chinese medicine wants to be acknowledged by the world and flourish, it must pass scientific tests. Like conducting the 'double blind' experiments, if we insist on ideology rather than evidence, then perhaps we should just keep it to ourselves. As a Chinese, I am proud of Chinese culture as you are and I believe in the value of traditional Chinese medicine as well. But I also believe in science and science may not be the only truth. However, isn't science nowadays widely applied?

12. 都带着浓浓的民族自豪感，若中医想走出国门发扬光大就必须经历科学的考验。例如“双盲”实验，若是坚持形而上忽略形而下，我们在自己家做好就好了。我跟你一样身为中国人为文化为历史自豪，也相信中医有价值。但我也相信科学，但我也认为科学不是唯一的真理。但在现在科学适用的范围太广了不是吗？

13. Some people think that western medicine is bullying traditional Chinese medicine. It's not. What is western medicine? Modern people would know treatments like bloodletting therapy and all kinds of witchcraft are way more outdated than classic traditional Chinese medicine, so traditional western medicine has already been replaced by modern medicine. Now, it's not about the conflict between traditional Chinese medicine concepts and western medicine concepts, but how traditional Chinese medicine needs to evolve into modern medicine and to use scientific spirits and methods to clean the traditional Chinese medicine system.

13. 有些人认为是“西医”欺负“中医”，并不是，传统西医是什么？抽血疗法换血疗法各

种血液疗法还有种种半巫半医术，现代人一听就知道比传统中医还落后，所以传统西医早就完蛋被现代医学取代了。现在并不是“中西方”的医学理念对立，而是中医需要进化成现代医学。用科学精神和手段将整个中医体系筛一遍。

14. Modern medicine is built on over 100 years of scientific development. The development of medicine is inseparable from the development of science, such as molecular biology and genetics. The reason why traditional Chinese medicine is being criticized is that it is based on a series of non-scientific theories such as yin-yang and five elements, which are oftentimes used by fraud gangs to swindle people, like Quanjian.

14. 现代医学更多的建立在近 100 多年的科学发展上，医学的发展离不开科学的发展，如分子生物学、遗传学等等。中国传统医学被人诟病更多的是其基于“阴阳五行”的一系列“非科学”的理论学说，这些也经常被诈骗团伙拿来忽悠老百姓，比如权健。

15. After viewing all these comments I realize that people's knowledge levels are so different across the country. Modern medicine is surely more advanced than traditional medicine. This is undeniable. If you have any problem, I strongly suggest you go to mainstream modern medical hospitals to see the doctors and check for pathogenesis. The side effects are not clearly stated in the instructions of traditional Chinese medicines because there is no rigorous and systematic clinical data, not because it is advanced.

15. 看完很多人的评论深刻的认识到，全国人民的认知在不同层面。现代医学肯定比传统医学进步，这点是毋庸置疑的。有问题还是强烈建议大家去主流的现代医学院看病，查一查病灶。中成药说明书那里副作用写不明是因为没有严谨系统的临床数据，不是因为它高级。

16. Should have three groups for comparison. One only uses traditional Chinese medicine treatments, one only uses western medicine treatments, and one uses no treatment. If not, then you can't really claim the power of traditional Chinese medicine. In addition, you should clearly define those advanced medical pieces of equipment like ECMO belongs to western medicine or traditional Chinese medicine.

16. 差三个对照组，一个只用中医，一个只用西医，一个什么都不用，不然就不能说什么中医威力显现。还有呼吸机这类高科技医疗设备到底是定义为西医还是中医这点要定义清楚。

17. I don't know if you all have heard about the theory of traditional Chinese medicine which has not improved at all over the past two thousand years. From my personal point of view, it is as unreliable as Horoscopes and Five Elements. Probably because I studied pharmacology in college. There are many criticisms toward traditional Chinese medicine because, on one hand, it shares different concepts with western medicine but it's hard to unify them both; On the other hand, years of education has made the concept of 'science' well-known by people, which does not agree with the concept of traditional Chinese medicine.

17. 不知道大家是否初步了解过中医的理论，它两千多年没有什么进步，在我个人的角度上，我认为它的阴阳五行和星座一样都不可靠。这个可能和我大学学的药学有关系。网上一片讨伐中药，因为二者理论不同，而统一起来又十分困难，另一部分是因为这么多年教育，“科学”这个观念深入人心，中医理论不合

18. You keep saying traditional Chinese medicine is effective, but we don't know how it works overseas, what percentage of overseas medical assistance is traditional Chinese medicine and what's the effects. This time, the news is rather unclear. Do you have results from a control group? What's the efficiency data of comparisons between pure traditional Chinese medicine treatment or pure western medicine treatment and no treatment? So far the WHO has not declared any particular treatment that is proven to be better and keeps emphasizing there is no specifically useful medicine.

18. 一直在说中医有效，一直不知道这次疫情中中医的输出怎么样，海外医疗援助有多少比例用的中医，效果。就比如这次，说得有多笼统，有对照组试验结果吗？比如纯中医治疗或中西医治疗的比没用中医治疗的有效率数据对比？世卫到现在为止，从来没说过新冠哪种治疗方法更有效，他们一直在强调没有特效药

19. You can't treat traditional Chinese medicine with national sentiment. If a thing is correct just because it has a long history, or if a myth can become a theory, then Copernicus's geocentric theory won't be established, and All known sciences in modern times will be overthrown. Traditional Chinese medicine does not vanish but is thriving. There are too many examples. How many years has the Hongmao medicinal liquor been sold? It was quite big news last year but we still cannot ban that Hongmao medical liquor.

19. 对待中医要明白，科学不能以民族感情而论。如果说以留传时间长就说明正确，以神话传说成为理论，那么哥白尼的地心说也早就不会成立了，而近现代的所有已知的科学都将被推翻。中国从来就没有像你所说的那样中医被消灭，反而是一直很强大。例子不举太多，鸿茅药酒卖了多少年？去年那么大的事，到现在依然扼杀不了鸿茅药酒。

20. How many policies that support traditional Chinese medicine still exist? Why western medicine is thriving but traditional Chinese medicine is not? Time is the best proof. There are some good parts about traditional Chinese medicine, but the general treatment method of traditional Chinese medicine will eventually be eliminated. Human beings have always been choosing the best way to survive.

20. 现在中医政策不扶持还能存在多少呢，为什么西医院遍地开花，中医药凤毛麟角，有时候时间是最好的证明，中医必然有好的部分，但是总体治病方式基本是要被逐渐淘汰的，人类一直在选择更有利于自己生存的方式。

21. Traditional Chinese medicine does not have a drug-testing process. People should learn the importance of the drug-testing process. It does not necessarily mean that one failure in that process can determine the invalidity of the drug, rather, this process aims to testify the general effect of the drug. More importantly, the drug-testing process knows what's the side-effect of the drug. Drug-testing can help understand the underlying mechanism that makes the drug effective. If traditional Chinese medicine does not know the mechanism, then the drug of traditional Chinese medicine may work for one and not work for the other one.

21. 中医缺乏验药的过程。大家应该去了解验药的意义在哪里，并不是说过不了验药就一定无效，而是说去证明它存在一个普遍的适用的效果，更重要的是，应该了解它的副作用在哪里。验药得了解这个药生效的药理是什么。中药如果没有了解它生效的原理，或许对某个人有用，或许对其他人没用。

22. Some people may ask: "why always apply the standards of western medicine to traditional Chinese medicine?" I cannot agree with this. Because no one has ever tried to apply the standards of western medicine and modern medicine to traditional Chinese medicine. It's just western medicine and modern medicine have the same goal, which is to effectively cure patients -- modern medicine has developed a methodology that has been through several tests and proven to be effective.

22. 有人问：「为什么总是拿西医的标准去要求中医？」我不敢苟同，因为从未有人拿着西医也罢，现代医学也好的标准去要求中医，只不过是两者诞生伊始便心有灵犀地背负了相同的使命——有效、安全地救助患者——而现代医学已经掌握了一套历经考验、行之有效的论证方法。

23. There is a weird phenomenon. Usually, we regard many things as untrue by default until there is a piece of evidence that can prove these things are true. However, when it comes to traditional Chinese medicine, people regard it as true by default. Unless someone can prove it's untrue, otherwise it stays true. This is not good.

23. 有个很奇怪的现象，对于事物的真伪，是默认为假，如果有证据证明为真，则断定为真，但是对于中药，群众的态度却是默认为真，除非你证明它为假，不然无法推翻为真的结论。这样不好。

24. At least modern medicine is built on anatomy, physiology, pharmacology, pathology, psychology, chemistry, biology, material science, and statistics. The drug is confirmed to be effective by going through three phases of clinical trials. Does traditional Chinese medicine belong to this? Entirely different.

24. 现代医学至少是建立在解剖学生理学药理学病理学心理学化学生物学材料学统计学等等基础之上的医学，药物是经过三期临床试验验证确定有效的。中医不属于它的范畴？完全不同吧。

25. People have been arguing about traditional Chinese medicine without knowing why there is someone who questions traditional Chinese medicine. "Traditional Chinese medicines" as results of years of practical experience have a certain value. However, the "traditional Chinese medicine theory" is an unscientific theory that has not been justified yet. The task for our contemporary people is to use modern scientific methods to study the pharmacology of "Traditional Chinese medicine" so as to develop truly efficient modern medicines. As for the recovery rate of traditional Chinese medicine, how many cases are due to placebo?

25. 关于中医大家吵来吵去却从没梳理清楚为什么有人质疑中医。“中药”作为经验得出的行之有效的药物当然是有价值的，但“中医理论”则是完全没有经过观测和证实的非科学理论。而我们当代人的任务就是用现代科学方法去研究“中药”的药理，从而研究出真正高效的现代药物。至于治愈的，安慰剂效应应有多少呢？

26. I don't want to make any actual comments because I don't really know the actual treatment effects of traditional Chinese medicine. However, if someone tries to brag about traditional Chinese medicine without practical, scientific, and logical clinical data that can validate the treatment effects of traditional Chinese medicine, then it will only make

traditional Chinese medicine worse. Of course, there is no need to intentionally slander traditional Chinese medicine. We need to be pragmatic about everything and use logical and precise scientific data to support our arguments.

26. 不了解中医对病毒的实际疗效不想作具体评价，但一些人如果在同样不了解中医或没有实际、科学、符合逻辑的临床数据来验证的中医疗效的情况下强行吹捧中医，只会让那些本来就对中医没有好感的人更加反感。当然，也不必故意抹黑。凡事还是要讲究实事求是，用符合严谨逻辑的科学数据来说话。

27. Right now traditional Chinese medicine is in a weak position. The biggest problem is not the conflict between traditional Chinese medicine and western medicine, but the conflict between traditional Chinese medicine and modern science. Western medicine originates from the modern scientific system. And traditional Chinese medicine is incompatible with the modern scientific system. We were educated to believe in science since we were kids, so it's not surprising that traditional Chinese medicine is in a weak position.

27. 现在中医相对来说是弱势，最大的问题并不是中医和西医产生了矛盾，而是中医和现代科学体系产生了矛盾，西医是依托现代科学体系产生的，而中医和现代科学体系并不兼容，我们从小到大的教育就是相信科学，所以中医会变成弱势，也是理所当然的。

28. There is no Chinese or western medicine, there is only traditional or modern medicine. Only those that can carry out scientific argumentation and at least have a theoretical basis can be inherited and classified as modern medicine for clinical use. The biggest problem nowadays is that people treat traditional Chinese medicine as witchcraft. It is good anyway, and it is magic. It is also the national treasure of Chinese civilization. You can't say anything about it or criticize it. That's why it's becoming more and more repulsive.

28. 根本没有中医西医，只有传统医学和现代医学，能够进行科学论证，起码有理论依据的，才能继承下来划到现代医学的范畴之内进行临床使用。现在最大的问题是有的人真就把所谓中医当跳大神用，反正就是好，就是玄学，也不管是什么，反正中华民族瑰宝，骂不得说不得，才越来越让人反感。

29. Traditional Chinese medicine can't identify what is actually working in the drug. This is why it's more of a metaphysics. Doctors would prescribe a lot of drugs to you but which one is truly effective? Or are they all effective? Can there be one less drug? If so then which one? Compared with western medicine, traditional Chinese medicine has side effects. Every medicine has its side effects. But we don't know what side effects. Many side-effects are long-term effects, and some side-effects have something to do with the dosage. However, traditional Chinese medicine cannot test all these as it's not easy for traditional Chinese medicine to extract the elements of drugs.

29. 中医找不到是什么在发挥主要药效。这个就是“玄学”的点，医生开一堆中药，是哪种有效呢？还是都有？少一味行不行？少哪一味呢？相比西药，还有副作用这点，都说是药三分毒，可是不知道什么毒，很多毒性作用是长期缓慢的，有的毒性和剂量有关，但中药没法验证。提纯这条路难走。

30. The pitfall of traditional Chinese medicine is its "unknown" nature. After several hundred years of development in modern medicine, modern medicine has formed a relatively

complete scientific system. Drugs of modern medicine have a definite molecular formula that can explain how drugs can exert their effects at the cellular level in the body. There are long-term clinical trials to verify the pharmacology and toxicology of modern medicinal drugs. Therefore modern medicine has been recognized by the public.

30. 中医的缺陷正是因为“不知其根究”。现代医学经过近代几百年的发展，形成一套比较完善科学的体系，药物有确定的分子式，有它在体内细胞层面，分子层面如何发挥药效，有长期的临床实验验证药理毒理。得到了大众的认可。

### **COVID-19 Double-negative Report Policy**

[Several Chinese overseas embassies issued the notification: Persons going to China must board the plane with a COVID-19 double-negative certificate] With the rapid changes of the global COVID-19 pandemic, several Chinese overseas embassies issued the notification that starting from October 29th, Chinese citizens abroad and foreigners need to obtain a COVID-19 nucleic acid test negative certificate as well as a COVID-19 serological test negative certificate within 48 hours before taking a flight to China (i.e. double-negative certificate). Both are indispensable.

【中国多个驻外使馆发布通知：赴华人员须凭双阴性证明登机】随着全球新冠疫情形势迅速变化，从10月29日起，中国驻多个国家大使馆发布通知，要求在海外的华人以及外籍人士在搭乘航班赴华前48小时内，须获取核酸检测阴性证明及血清检测阴性证明（即双阴性证明）方可登机，两者缺一不可。

### ***COVID-19 Double-negative report policy emotionally-agreeing comments***

1. The pandemic has already ended in March and April in China. Why didn't you come back then? You won't come back for so long and now you want to come back. It's not like we don't let you come back, just need you to get the test first. Is it so hard?

1. 疫情3, 4月就结束了，你早干嘛去了，这么久不回来，现在想着回来，又没有不让你回来，检测很难吗？

2. It's not easy for us to control the pandemic. We must strictly defend ourselves.

2. 我们好不容易才控制住疫情的，必须严防死守

3. I see. So are you saying that it is China's fault that it takes such a long time in other countries to get the test?

3. 我懂了，其他国家检测时间长也是中国的错呗？

4. Those who complain that they cannot come back home, don't blame China for the low efficiency of other countries.

4. 说回不来的，别的国家效率慢也要怪在中国身上

5. So it is China's fault that other countries cannot get the test done and cannot get the results quickly? Sorry, but here in China, we can get our test in the morning and our result in the



afternoon.

5. 所以别国测不了 出结果慢都是国家的错呗？不好意思我们国家现在上午测中午就出结果了

6. I am speechless. So China can get the result fast, is this wrong? Haters are going to hate.

6. 我也无语了，中国出监测结果快，这也有错？杠精真是啥都能杠

7. Yes we don't want you to come back. What can you do about it? If one case is found in China, everyone in that city needs to get a COVID-19 test. The case in Puyang has undergone 14 days of quarantine and got negative results twice, but eventually, he was tested positive anyway. Can you be responsible for all these human resources, material resources, and energy used to control the virus?

7. 就是不让你回来，你咋的吧。国内发现一例，全市都要做核酸检测，濮阳那个隔离14天，核酸两次阴性，最后还是查出来阳性。这人力物力精力，你负责的得了？

8. Those who complain about slow test results and inconveniences in the commentary section, should you blame those countries? Why blame China? We didn't stop you from coming back.

8. 评论里说检测结果出来慢，不方便的，不是应该骂那些国家吗，干嘛骂自己国家，没不让回来啊

9. This is for the safety of Chinese citizens. Those who complain have no shame.

9. 这么做不还是为了国人的安全，抱怨的一个个都不知好赖

10. Why didn't you come back when you could? Why would you have to wait until now when the situation is worse? Shouldn't those who went abroad realize it won't be as convenient in other countries as in your own country?

10. 为啥之前能走的时候不来，非要这么严重再投毒回来？出国的难道意识不到在别人国家没有在自己母国那么方便吗？

11. At this very critical moment, instead of staying at home, you have to go abroad. Now we want you to show the proof of no infection, but you blame us for not allowing you to come back. Who do you think you are? We can only let you do whatever you want to do but cannot regulate you. You want to go abroad that's fine but it is not ok if we don't want you back. You are treating other people's lives as a joke, just to prove your own value?

11. 关键时期，不让你去串门，你非得出去得瑟。现在让你拿着没有感染的证明，又怪家里不让回来。自己没数吗？就得惯着你，不能管着你。想出去就出去。不让回来还不行。拿着别人的生命安全开玩笑，就为了证明你的价值？

12. How is this to do with China that it takes so long to get the test result in other countries?

12. 别的国家出结果慢关中国啥事？

13. During the Chinese New Year, the place I lived was not a pandemic area. However many people went to the downtown area in the morning to go to work and could not enter their homes when they were back and they were blocked. There is nothing you can do about it. It's

for your safety! You can only obey! Do you think you are so privileged just because you went abroad? We have been working so hard for so long and can't let you ruin our efforts.

13. 过年期间我所在的地区不是疫情区，很多人早上去市区上班了回来就进不了家门了封锁了，能怎么办，为了大家的安全！只能服从！咋滴你出个国就了不起了？我们辛苦努力了那么久，岂能让你一颗老鼠屎坏了。

14. If you have to say that we don't allow you to come back, then yes. Now there are still new cases that are not imported cases. There are still some new domestic cases emerging from time to time. Come on. Didn't we let you come back if you can provide the certificate? You don't have that certificate and want to blame China for this? Why don't you go blame the country you're living in as well as the transit country? If China's pandemic is still serious would you come back?

14. 非要说不让你回来就不让你回来啊，现在新增的不都是境外输入。时不时国内还爆发小范围的疫情，得了吧，你检查通过不让你回来了吗，你没有检查报告怪中国？怎么不怪你去的国家和你中转的国家，要是中国疫情严重你还会回来吗？

15. If you can't come back, blame the country you're staying in for not being able to give you the test result earlier, don't blame the motherland.

15. 如果回不来要怪怪你自己待的国家不能早点出报告结果，别怪祖国

16. Some people just want to take advantage of everything and don't want to take any risks. You don't come back when you can and now it is restricted and you curse and complain. What does our country owe you? Do you think you can do whatever you want to do? My neighbor's husband got an air ticket before October 1st and it was not easy. He has been quarantined for a month. Those who cannot come back, you know the reason yourselves.

16. 有些人就是啥好处都想占，啥风险都不想承担，能回来的时候不回来，现在限制了，又骂骂咧咧阴阳怪气的，怎么国家欠你们的么？想怎样就怎样？我邻居的老公就是十一之前好不容易搞得机票回国的，隔离了一个月。那些回不来的，什么原因自己心里清楚。

17. You don't blame other countries' inability of getting tests but you blame China. You don't blame other countries for not being able to control the pandemic but you blame China. China has spent so much money and sacrificed so many nurses to fight the disease. I don't think it is a problem to be so strict. If you want to blame, blame the country you are staying in for its failure in fighting the disease.

17. 不怪别的国家检测能力不行就要怪中国，不怪别的国家对疫情放任不管总之怪中国就对了，国家花了那么多钱和牺牲了那么多医护抗疫，搞这么严格我觉得没有问题，要怪就怪你呆的国家抗疫不行你就凭啥怪国家。

18. We are not saying we don't allow you to come back. We just want you to get a test and prove yourself healthy first. If there are full of patients in China, would you still want to come back?

18. 又没说不让人回来，是让你去检测没病了再回来，如果国内全是病人你还会回来么？

19. Your own wishes are not fulfilled and you think our country is trying to hurt you. I hope you all successfully emigrate overseas as soon as possible!

19. 自己的愿望达不成就是国家要害你们呢。那祝你们早日移民成功吧！

20. Why can't people who obey the rules and fight the disease cannot have protection and security? You have lived in other countries for so long, and now you don't want to die and want to go home, is it too much to ask for you to get your test twice? Why should domestic citizens take the risk for you? Can't you be responsible for others?

20. 国内安安分分抵抗过疫情的人凭什么不能有这样的保障啊？你在国外呆够了想保命想回家检测两次怎么了？凭什么国人要承担风险让你回家，对国人负责不好吗？

21. I don't think they truly want to come back. If so they would have come back earlier. It has been a year.

21. 真的感觉他们也不是很想回来吧，想回早回了，疫情都一年了

22. It's not like we don't let you come back. Is it too much to ask for you to get your test? Those who wanted to come back have already come back at the beginning of the pandemic. Those who didn't come back at first feel like they are going to die, and now they want to come back so they are moral kidnapping our country. Do you think we should allow you to come back with the virus and harm 1.3 billion people? This world does not rotate around you. You deserve it. You had a chance but you didn't take it. Now you want to trouble our country.

22. 又不是让你不回来，让你做检测过分？开始疫情爆发想回来的都回来了，不回来的也就是这些了吧，现在感觉在外面待着小命不保就知道来道德绑架了？让你们带着病毒直接回来祸害 13 亿人吗，世界不是绕着你们转的，说到底还是自己活该，给了机会不抓紧，现在回来麻烦了还怪祖国

23. Those who complain that China doesn't allow you to come back in the commentary section are actually admitting that the efficiency of western countries is really low.

23. 评论里那些说不让回来的就是变着法承认西方国家办事效率不行呗

24. Can't believe it. If you don't have the certificate and you infect someone after you came back, do you want to use your keyboard to save lives?

24. 绝了，没有证明万一回来又传染了键盘侠去救人吗？

25. If you want to come back you would have come back already. Those who do not want to come back, who cannot afford the air ticket, who are living in a place where the test ability is weak, do you think cursing on Weibo can help you??? Do you want to blame us if you cannot afford the air ticket? And who is to blame if the place you are staying at can't get you the test result? If you have time, why don't you learn how to cook some dishes. Protect yourself abroad, cook some meals. And also, why do some people call themselves overseas students already before they go abroad?

25. 要想回来早就回来了吧。不想回来，买不起机票，自己所在地区检测能力不行在微博上骂骂就有了吗？你买不起机票怪我吗？你所在地检测不出来怪谁喔？有那时间不如多学两道菜吧。在国外保护好自己，做做饭。还有的人还没有出国，就已经自称留

学生了？

26. You can get the test result within 48 hours anywhere in China. You can't get your result overseas and you blame China for this? Why don't you blame those countries?

26. 在中国任何地方除了双休都可以 48 小时拿到双阴证明，你们国外拿不到怪祖国不想你们回来？你们怎么不怪外国那些国家有问题呢

27. Now you know it is safe to be in China so you want to come back. But why you left China in the first place? I hope those who live abroad are not so egocentric. Chinese people do not own you anything. You must obey the policy, otherwise, just stay abroad.

27. 知道国内安全就想回来了，当初走是为了啥？希望你们在国外生活想回来避难的人不要这么精致利己，国人也不欠你们的，政策必须遵照，不然就留在国外吧。

28. Don't let anyone come back ok? Haven't you learned from the lockdown of Wuhan? Do you want people to go through another round of lockdown?

28. 别让人再进来了好吧，难道武汉封城的教训还没学到？想让人民再来一次封城的代价吗？

29. You blame China for the low efficiency of other countries. Really can't believe these people.

29. 别的国家效率慢也要怪在中国身上。真的服了这些人了

30. The efficiency is low in other countries, but you blame China?

30. 其他国家效率低，还怪中国？

### ***COVID-19 Double-negative report policy analytically-agreeing comments***

1. China has sacrificed a lot to have today's security. We are all Chinese, and it is not your fault to study abroad. But you need to be responsible for yourself and for China. China always welcomes you, but you need to be responsible for Chinese people.

1. 我们中国牺牲了多少才换的中国相对平安。都是中国人，留学没有错，更是要对自己的国家负责，国家随时欢迎你，但是也要对中国人民负责。

2. I support it! It's getting cold and the virus may come back. The special policy should be treated seriously in order to lower the infection rate. Who can understand what it feels like to stay at home for three months and to wear a mask all the time even if the face is hurting? But we should cooperate with the country and Party. Let's understand each other.

2. 支持！天气冷了，怕疫情卷土重来，减少感染几率，特殊政策对待。谁能体谅在家关了三个多月不能出门。到现在还没摘过口罩，脸捂坏了也还是要戴口罩。配合国家配合党，相互体谅吧

3. Everyone please stay rational. The policy decision is made through careful consideration. When personal interests conflict with collective interests and social interests, we should insist on focusing on collective interests and should be willing to give up some personal interests.

From a long-term perspective, upholding the collective interest is the greatest protection of individual interests.

3. 请大家保持理性，出台的政策决定经过深思熟虑，当个人利益和集体利益、社会利益发生矛盾时，我们坚持以集体利益为重，并愿意放弃一些个人利益。从长远看，坚持集体利益是对个人利益的最大保护

4. I am an overseas student. I got off the plane yesterday afternoon. I got my test before boarding and got the result in the evening, and then I was approved to board. I had my second test after I got off the plane. And I will need to do one more test after twelve days. Strict control is for the sake of yourself and the lives of others. If you choose to come back, you need to accept these requirements and don't complain. No one forces you to come back.

4. 本人留学生，昨天下的飞机。上飞机前做了核酸检测，当天出了结果，然后申报通过后上了飞机。下飞机做了二次核酸检测，十二天后还有一次核酸检测。管控严一点是对自己及他人生命的负责，选择了回来就接受这些要求，不要抱怨，回国这件事不是任何人逼你的。

5. I am an overseas student as well. But the pandemic in South Korea is not that serious. My classmate is still in England, but she came back in March when the situation was serious. The process was difficult. Now it's November, and many students have come back yet. It's not like they don't want to come back, it's just after consideration they believe the benefit of staying there is better than coming back. People blame China for the five-ones policy, and people blame China for this now. Many people only consider their own interests, and they don't consider how bad it could be if there is another round of the pandemic in China.

5. 我也是留学生，不过在韩国不是很严重，我同学在英国，那时候 3 月份最严重的时候，她回来了，过程非常的难。现在都快 11 月份了，很多还没回来，不是回不来是考虑了半天后，觉得自己目前的利益大于现处的危险。五个一出来骂国家，这个出来还骂国家。很多人只考虑对自己不利，没考虑过国内再爆发了不堪设想

6. We can't make the policy based on your personal needs. We need to know this is China's standard. I hope people in other countries could appeal to the governments of those countries and tell them to improve the strength of the fight against the pandemic. 48 hours is the lowest standard in China. One imported case will cause thousands of people in a city to get test again. Can you at least show some understanding of the country? We cannot afford another round of the pandemic. Our economy cannot be hurt again. China has the most strict anti-disease system because we have a large floating population. We need to make sure everyone is healthy.

6. 没办法私人订制你们的检疫标准，这样也好让全世界知道中国标准，希望海外的人向所在政府施压，改善抗疫的力度，四十八小时已是中国最低标准了，中国一个输入型病历全市几千万人重新检测，有理解国家的点吗？折腾不起新一轮疫情了，经济不能再受创，中国防控是最严，流动人口太大，为了保证大家都没病

7. This is a choice. You made your choice you need to bear the consequence. To be honest, you should have come back months ago when the policy wasn't that strict. Now there is another outbreak in Europe and the United States, China needs to consider 1.4 billion people

first. If we cannot control the disease, you won't have a secured home to go to when you are back.

7. 这就是选择吧，选了自己就要承担后果吧，说实话，前几个月政策放宽了就该回来了，现在欧美再次爆发，国家肯定首先以 14 亿为重，到时候国内控不住，你们连回来的安全窝都没了

8. Winter is coming and the pandemic is back. For the sake of 1.4 billion people, we need to upgrade the pandemic protection measure. I totally agree with the decision made by the government.

8. 凛冬将至，疫情抬头，为我国内 14 亿人民着想，升级防控措施，我完全赞同政府的决策

9. I used to be an overseas student. We are all compatriots and no one would treat you differently. But you are all adults and should know that just because we didn't give you special care doesn't mean we don't care about all citizens and overseas citizens. It's just there are 1.3 billion people to take care of and we cannot reach every aspect of a matter. Would you also complain when the embassy gives you masks and disinfectants?

9. 我以前也是留学生，我们都是同胞，不会有人区别对待你。但是也都是成年人了，要明白一个道理，没有特别照顾你，不代表不在乎全体公民，也不代表不在乎海外同胞，13 亿的群体，不可能面面俱到。大使馆给你们发口罩消毒液的时候你也骂吗？

10. As a Chinese living abroad, although I want to go back to China all the time, I do understand China. After all, people living overseas are the minority, people living in China are the majority. People living abroad should take care of themselves, cooperate with the work of China, and go back home safely.

10. 作为一个在海外的中国人，虽然时时刻刻想回国，但是也理解祖国。毕竟在外面的人是少数，在里面的同胞比较多，在外面的大家都好好照顾自己，配合祖国工作 平平安安回家

11. 1, We did not say you can't come back, there are just some conditions. 2, According to the domestic nucleic acid test speed (take our hospital as an example), you can get your result on the same day. You can board with your test report within 24 hours, or even 12 hours, or even 3 hours. 3, It's the foreign government's responsibility if you can't get your result in time. Our policy is based on China's efficiency.

11. 1, 没说不让你回来，只是限定了条件。2, 按照国内的核酸检测速度来说(就说我们医院)，当天出结果，你可以拿 24 小时甚至 12 小时之内甚至三小时之内的检测报告上飞机。3, 国外结果出不来你找国外去，我们是按中国速度算的。

12. Ugh ... during this moment, it is indeed hard to do anything. This virus is troublesome. For example, if I am going to be hospitalized for surgery, I need to do the nucleic acid test and CT first. Besides, nucleic acid test certificates are also required for family members who want to come here to visit and provide care, which makes things that are originally very simple require many considerations. From a holistic perspective, these operational requirements are also understandable.

12. 唉.....这期，具体操作起来确实不容易。这病毒真得是，比如我要住院手术，住院前核酸 CT 检验是必检项，而且家属来病房看护探视也需要核酸检验证明，这就使得本来很简单的事让人得多方面考虑。全局视角下，这些操作要求也可理解。

13. Since the test results in foreign countries are slow, you should blame foreign countries, not China, and its strictness. Because domestic stability of the pandemic is the result of a great price paid by the whole country. It is not easy that we have resumed our normal life and work. Long stay and more contacts result in more risks. How to ensure safety without strict requirements? Why can't we ask for a double-negative report from people living in severely affected areas? The country cannot just think about what you want to do but ignore public safety.

13. 国外检测出结果慢，你要怪国外，不该怪中国严格，因为国内稳定，是举国上下付出了极大的代价换来的。好不容易做到可以正常工作生活，停留久接触多风险大，没有严格要求怎么确保安全，凭什么不能对疫情严重地区回国的人要求双阴性呢？国家不能只考虑你要办事，而罔顾公众安全。

14. Honestly speaking one of my classmates went to England before, but she didn't come back when the situation was serious because she couldn't purchase the ticket. But during April and May when the situation was cooled down she managed to come back. She stayed for a month and went abroad again. That means there was indeed a time period in which she was able to come back to China ... ..

14. 说真的我一个学妹之前去英国，最严重的时候没回来，因为回不来没买到票，但是四五月份，没那么严重的时候还是回来了，待了一个多月又回去了。证明中途有个时间还是能回来的.....

15. I don't think the double-negative test requirement was that harsh. After all, the current well-controlled situation in China is the result of everyone's self-quarantine and the hard work of medical staff. Compared with 65 million people in England, we cannot relax. It's just that the requirement of getting the result within 48 hours overestimates the work efficiency of Europe.

15. 并不觉得双阴性测试是苛刻的条件。毕竟国内现在控制良好的局面是全国人民家里蹲，医护人员一刻不停轮番检测换来的。相比于 6500 万人口的英国，确实不能松懈。只是对于欧洲的工作效率，48 小时太高估了

16. I feel that most of the overseas students are pretty reasonable. But it's ridiculous that some people pretend to be victims and then blame China when the problem is really about the low efficiency of European countries.

16. 感觉大部分留学生还是挺理智的，但是部分一上来就卖惨然后说国家政策不好就很过分，本来就是欧洲国家效率低下的问题，国家这个政策难道不是为了保护国内尽可能不被境外输入吗，不能保证自己安全的情况下回国的确对国内不友好啊。不去骂效率低下的国家反而来骂自己国家就很无语。

17. Yes. There are many overseas students around me who have already come back long ago, including those exchange students. For those who haven't come back yet, they have made

some trade-offs and think that staying abroad is better for them. Since this is the case, don't blame the country for deciding to put billions of people's interests first after considering the trade-offs.

17. 是啊，我身边也很多留学生，早都回来了，包括出去交流的也回来了。现在还没回来的，那基本是自己权衡之后觉得暂留国外对自己利益更大，既然这样，也别怪国家权衡之后以十几亿人民利益为重了。

18. Since you want to come back to China, you should follow the requirements issued by the embassy. After all, it is not easy for China to finally control the disease. Don't you forget how serious the outbreak was at the beginning of this year? Not to mention the dangerousness during the trip when one tries to come back from abroad.

18. 既然要回国内，就还是要遵守大使馆发布的回国要求吧。毕竟国内好不容易控制好疫情，难道都忘了年初爆发疫情时候的情况了吗？何况从国外回到国内，途中也是有一定的危险性的

19. My god, I have just found that there are so many people who try to direct the public opinions on Weibo. Everyone, please stay rational. The policy decision is made through careful consideration. When personal interests conflict with collective interests and social interests, we should insist on focusing on collective interests and should be willing to give up some personal interests. From a long-term perspective, upholding the collective interest is the greatest protection of individual interests.

19. 天呐，我才发现微博是真的很多试图引导舆论的人，请大家保持理性，出台的政策决定经过深思熟虑，当个人利益和集体利益、社会利益发生矛盾时，我们坚持以集体利益为重，并愿意放弃一些个人利益。从长远看，坚持集体利益是对个人利益的最大保护

20. China is a country with a 1.4 billion population. I believe that every decision it makes must be made based on careful consideration by many professional departments, not on your words or my words. The decision can guarantee the interests of more people. Putting collective interests first is the common sense of every Chinese people. There must be many people inside or outside China that are feeling wronged and complaining, but what decision can satisfy everyone?

20. 中国是个 14 亿人的国家，我相信它做的每个决定肯定都是经过很多专业部门的深思熟虑才出来的，不是在这你一言我一语的，它能保障的是更多人的利益，保大局好像是我们每个中国人骨子里的认知，或者国内或者国外肯定都有人在委屈和抱怨，但是哪个决定又能让所有人满意呢？

21. Shanghai is miserable as it has imported cases every day. Anti-disease personnel is really hardworking. Which of the staff responsible for testing them is not risking the risk of being infected while testing them? Now that this policy has been issued, you should get your things done before coming back to China. Otherwise don't come back. Everyone's life is equal. From the beginning of the outbreak until now, the anti-disease personnel at Shanghai Pudong airport are working so hard every day. Hope everyone can understand.

21. 上海天天境外输入才惨，防控工作人员一个个特别辛苦，负责给他们检测的工作人员哪一个不是冒着被感染的风险给他们检测，既然出了这个政策就乖乖在国外弄好再回



国，再不然就别回国了，谁的命都是命，上海浦东机场那些防控工作人员从最开始疫情到现在一个个特别辛苦每天都是拿着生命在工作，望理解

22. The pandemic is pretty serious now. I hope everyone can understand the measure taken by China.

22. 就是现在疫情严重，国家做的应对措施望理解

23. So many medical staff have sacrificed their lives in order to prevent the second outbreak. We should obey the policy even though it's strict instead of blaming China and saying that China doesn't want overseas citizens to come back home.

23. 今年防疫那么多医护人员牺牲了性命，为了不再爆发第二次大规模疫情，难点我觉得也应该遵守，而不应该处骂祖国不好，说祖国不愿意让海外的人回家。

24. Those who said that people in the U.S. cannot come back home, then why we are able to come back? If you did try to come back earlier when the anti-disease policy was not that strict, there were many ways you could come back. Isn't it a simple thing to do to have a quarantine and a test when you're back and then another quarantine at home? You shouldn't just think of yourself. Since you want to come back you need to obey the policy instead of agitating which is meaningless. Might as well cooperate and come back sooner.

24. 说在美国回不来的人，为什么我们都可以回来，如果你们之前想办法真的想回来，很多种途径可以，防控不严的时候真的很容易回来，回来隔离加检测，居家再隔离，不是很轻松的事情吗，你们不应该只考虑你们自己，你们既然想回来就要配合政策，而不是各种煽动，真的毫无意义，还不如好好配合早点回国。

25. But it is not China's fault that it has a strict anti-disease policy. You shouldn't blame China if you cannot get tested. You should blame the country you are staying in for its incompetence. Even if China wants to help other countries conduct the test, there is no way to do so.

25. 可是中国国内严格防控也并没有错。你们无奈做不了检测，不应该责怪中国，怨就怨你们的居留国的检测不给力。中国就是想要在国外帮忙检测，也是有心无力。

26. Now if we need to go to the hospital ourselves we need to do the nucleic acid test and antibody test. Companions also need to do the nucleic acid test. If we want to visit others in the hospital, we need to measure our body temperature, show the green code, and fill the epidemiological form. But have we said anything about it? We haven't. We feel that these are necessary. Protecting others is protecting ourselves. It is not wrong to want to come back, but you don't want to infect others, right? I think China is doing great. China's anti-disease measure is the best in the world. So China is now the safest place in the world.

26. 我们现在自己去住院都要做核酸和抗体，陪护的都得做核酸，去探病的都要量体温、绿码、填流调表。我们说什么了吗？都没有，都觉得应该的，保护别人也是保护自己。想回来没错，但是肯定不会想传染家人朋友吧？我觉得国家做得很好，全世界的防疫中国做得最好，所以现在中国最安全。

27. We have all been abroad before. We all used to have the mentality of wanting to stay abroad and wanting to come back anytime we want. Since you have chosen not to come back

before, you need to accept the fact that now there is the serum test required. You can't have all the benefits. Besides, requiring one more test can guarantee the safety of people who travel from abroad to China. In addition, do you think the policy will be canceled just because you are complaining here? Don't be naive.

27. 大家都是在国外待过的，又想留国外，又想随时回来的心理谁都有过。你自己既然选了之前一直不回，现在增加血清检测你就学会接受，不可能什么好处都给你占了。而且增加检测对大家回国途中的安全性也是增加了保证。另外，你在这各种喷这条政策就能取消了？别天真了。

28. To be honest, we have no malice toward overseas students, and we welcome everyone to come back. But the premise is that you should follow the current anti-disease regulation. You can't complain about China for having a strict standard and satirize China all the time just because other countries are not efficient in issuing the test certificate. The pandemic was alleviated before and many of my classmates had come back from abroad at that time. Although it's not easy, they all came home safely. Now that everyone knows what is going on overseas, can the pandemic prevention measures not be strict?

28. 老实说，对海外留学生华侨回国一点恶意也没有，欢迎大家回来。但前提是你得遵守防疫规定吧，不能因为所在国家效率低下证明难开，就一个劲说国家定的标准太严，在评论里阴阳怪气。之前疫情有所缓和，我的很多同学从国外返回，虽说也是一波三折，但是都好好到家了。现在国外什么情况大家都知道，能不严吗

29. Those in the commentary section who said that China doesn't allow people to come back because the time for getting the test certificate permitted is not enough, what are you thinking? Take Malaysia as an example,

29. 评论里那些说不让回来的，检测时间不够的，到底在想什么？就拿马来西亚来说，都是当天做完检测，第二天一大早就拿到报告，缩短期限只是为了防止回国的人员，保证感染的几率更低。再说，即便放宽政策，让大量人员回国，造成国内第二波疫情，你是帮着医生治疗呢？还是让床位缓解压力？

30. Those who said the air tickets are expensive, I have experienced the same thing, I do not have money either. I searched for tickets in the last half-year over and over again. If you talk about the study, the job, the concerns for the cancelation of airplanes, sorry, I have experienced all these. Perhaps even more. Frankly speaking, the problem is that some people think that not coming back is better than coming back, and I don't think this is wrong. However, since you have chosen to come back, you should try your best to solve all the problems instead of complaining to the state. The state does not owe you.

30. 说机票贵的，我也经历了，我也没钱，之前半年天天刷票。说学业，工作，机票取消一堆要考虑的，不好意思，我也经历了，可能还比你经历的更多。说白了，这事就是有些人认为不回国的利益大于回国的利益，我不认为这事有错。有问题的是，你既然选了这条路就想办法解决困难，而不是喷国家，国家不欠你。

### ***COVID-19 Double-negative report policy emotionally-disagreeing comments***

1. There is a way to go back home but this way is becoming narrower.

1. 回家有路但这条路越来越窄
2. How do you expect overseas students to go back if they haven't graduated yet?  
2. 留学生不毕业怎么回去?
3. How come Chinese citizens are not allowed to come back? What does it matter even if they have COVID-19?  
3. 中国人为什么不能回来? 就算有新冠又怎么样?
4. It's just they don't want you to come back that's all. They want the number to look good. If you do want to fight the disease, you can double the quarantine time, even triple it. The intention behind this policy cannot be more obvious.  
4. 就是不让回来而已, 为了数字好看而已。你要是为了抗疫, 隔离时间可以翻倍, 翻三倍都行。出这个政策意思不要太明确。
5. It is an inhuman policy, why blame overseas students??  
5. 本来就是政策出的不人性化, 怪留学生??
6. I pity those Chinese who work overseas. They are truly miserable.  
6. 同情那些在外国工作的中国人, 真的太苦了
7. A policy that prevents you from coming back.  
7. 防你回家新政策
8. I am so angry that I am speechless. I plan to graduate first before going back to China. Just two more years.  
8. 气得无话可说。我准备好先毕业再回国了, 也就再两年吧
9. Don't the Chinese overseas have the right to return home at any time?  
9. 难道在海外的华人没有随时回国的权利吗?
10. Those who said that it's been a year what did you do earlier, these words really hurt. Most of the people who have just come back now are people who were thinking about not causing any trouble to the motherland. Now there is really no way. Their visas are about to expire. Why people who have graduated can't go home? And those who said that because people who run away from the city right after Wuhan was locked down should be blamed, people who want to come back to China because the pandemic overseas is serious should also be blamed, please, is going back home the same thing as running around inside the home?  
10. 那些说都一年了现在才回来早干嘛去了的, 真挺寒心的, 现在才回去的大部分就是当初想着不给祖国添麻烦的人, 现在实在没办法了签证要到期了, 人都毕业了还不能回家了? 还有说什么武汉封城往外城跑的人被喷, 现在国外疫情严重了要回来难道不该喷的人, 拜托, 回家跟在房子里乱窜能一样吗?
11. Those who want to escape from the pandemic have already come back in March and April,

and those who want to come back now are people whose visa is about to expire and who have to come back because they have graduated or there is an emergency in at home. This policy almost puts NO WAY on its title.

11. 躲疫情的三月四月早就回去了，这个时候回国的，多是签证到期或者因为毕业、家里有急事不得不回，这个政策就差把休想俩字写在标题上了。

12. Double-negative certificate + double-negative certificate from the transit country within 48 hours? Why not just say you don't want us to come back? Why bother doing all these?

12. 48 小时内双阴性证明+转机国双阴性证明？直接说让我们别回去不就好了，大费周章搞这些干什么？

13. This is another way of not letting Chinese citizens come back!

13. 这个就是变相不让中国公民入境！

14. Why write so long? Should just say do not come back directly.

14. 何必写这么长呢，直接说拒绝入境不就可以了

15. Under such policy, it's hard to come back home even if not infected.

15. 这种政策，真是没病也很难回家

16. Basically there is no hope of returning home. Feel bad about many overseas students. They have been waiting for the Christmas holiday to come back since the beginning of this year. But the new policy is pretty confusing. Everybody's health, energy, and even money seem to be worthless.

16. 基本回国无望。心疼很多留学生，好不容易从今年年初熬到圣诞放假，但是新政策未免太迷惑，大家的健康、精力甚至钱财显得一文不值。

17. If you don't want people to come back just say it. How is that possible to do a nucleic acid test + an antibody test within two days?

17. 不想人回就直说嘛，两天时间去哪能做完核酸+抗体检测

18. Sigh, overseas students are truly miserable.

18. 唉，留学生是真的惨。

19. The policy clearly doesn't want you to come back. No country can provide the test result within 48 hours.

19. 明摆着就是别回来。48 小时内结果没有国家可以做到。

20. It hurts the feelings of those workers and technical service personnel involved in the construction of the Belt and Road Project.

20. 让参与一带一路建设项目的工人和技术服务类人员寒心了

21. Easier said than done. Those who have already come back are now happy, but how about those who originally scheduled their air tickets in November?

21. 站着说话不腰疼系列。很多人回去了开心了。那些原本定 11 月机票的呢？

22. From the perspective of national interests, the interests of a small number of people deserve to be sacrificed! Because your interests are so small, they are not worth considering. There is only a cold policy which builds a high wall of difficulties beautifully saying that: it's not that we don't consider your situation, it's just you didn't meet the requirements.

22. 在国家利益看来，小部分人的利益就活该被牺牲！谁让你是小部分人的利益呢，都不值得被考虑！只有冰冷的政策，竖起困难的高墙，还美其名曰：不是我不考虑你情况呀，是你自己没达标呀！

23. Not everyone has the ability to spend 150,000 RMB to rent an airplane or to spend 70,000 or 80,000 RMB to purchase an air ticket at the beginning of the pandemic. Overseas students understand the pain of not being able to come back home better than you keyboard men. I dare you to spend 30 hours on the plane without eating, drinking, and going to the restroom.

23. 不是每个人都有能力在疫情初期就 15 万包机，买 7.8 万机票回来的，有家不能回的痛苦留学生比你们这群键盘侠更懂，你有本事也做三十个小时飞机不吃不喝不上厕所试试。

24. Even if you're not an overseas student, you should know many students can't graduate until September. Isn't it normal to come back home after graduation? How is that spreading the virus in some people's words?

24. 不是留学生也应该知道很多人九月份才毕业吧，毕业回国不正常吗？怎么在有些人嘴里就是跑毒了？

25. Hahahaha it's another way of not letting people come back to China.

25. 哈哈哈哈哈就拐着弯儿地想方设法不让大家回国呗

26. Why not just cut off all airlines? Why bother doing all these?

26. 干脆断航算了，何必弯弯绕

27. For those who said why come back, are Chinese citizens not allowed to come back? And for those who said why study abroad, is the current number of universities in China sufficient enough for all Chinese young people to receive university education? Full of hatred!

27. 那些说回来干嘛的，中国人不能回家？还有那些说干嘛出国留学的，中国现在的大学数量能容纳多少中国年轻人接受大学教育？真是充满戾气！

28. Is this not allowing people to come back? There is no way you can get the report within 48 hours in England.

28. 这不就是不让回去吗？英国检测报告 48 小时拿不到的

29. I have to say the domestic malice towards overseas students is great.

29. 不得不说国内对留学生恶意真大

30. What does "there are many chances to come back" mean? You give them the chances?

Why haven't I seen you become so rational when many people's airplane tickets have been canceled?

30. 什么叫有的是机会回？你给的机会？多少人机票被取消了怎么没见你这么理智呢？

### ***COVID-19 Double-negative report policy analytically-disagreeing comments***

1. First of all, I understand that this policy aims to release the domestic pressure as there are too many imported cases recently because someone used fake negative reports to get on the plane. But if the policy turns out to be so strict right now, might as well forbid all airlines. Asking the state to provide assistance for overseas citizens and help them come back to China is the responsibility of the modern state. If the state cannot allow so many people to come back at once, the state should just admit it and has no need to distract people's attention.

1. 首先很理解这个政策，为了缓解国内的压力，最近境外输入确实有点儿多。可是因为有人拿着假的阴性报告上了飞机，但现在这样还不如直接断航了呢。要求国家对海外公民供帮助和协助回国是现代国家理所应当对公民承担的责任，一下防不住那么多人一块回国就老老实实承认，何必要转移视线

2. It's not like people don't want to spend money to get tested, it's just so difficult for people to get the certificate and upload it within the prescribed time. The rising air ticket price and the difficulty of getting air tickets caused by the ban on airplane transit have incited many complaints as well. There are not just overseas students staying abroad but also overseas workers and overseas corporate expatriates.

2. 不是说大家不愿意掏钱做检测，而是要在规定时间内拿到证明并且上传有多难操作。而且不允许转机导致机票价格如何飙升如何难买这件事让大家有怨言。海外不只是有留学生 还有海外劳工，还有企业派驻人员。

3. The embassy or consulate in each country must know that most of the countries cannot meet this strict requirement. Basically, people need to leave their own country and go to another country where they are unfamiliar with and then do a double-test. Basically, every link is a risk, but they still chose to do so. Actually, this policy is equal to the ban of all airlines. It just seems better. Those who blame overseas Chinese, if you know the story and dilemma of overseas students, employees, and workers, I believe you won't do so anymore.

3. 各国使领馆一定都知道大多数地方根本达不到这么严苛的条件，中转基本要出境去人生地不熟的国家住宿再做双测，基本每一个环节都是风险，可他们还是选择这么做了。其实就等同于断航，看上去好看一些。骂海外同胞的大家，你们如果知道外面人（学生、出差、劳工等）的故事和窘境，我相信你们不会这么说的。

4. Not everyone has a direct flight, so the worst part is that people need to do another test in the transit country. For example, if your transit country is in the middle east and you only have 6 hours before your next flight, can you show me how can you go to all testing stations from the airport and get your test done within such a short time period at a place where you barely know? In which country on the earth can you do all that?

4. 并不是所有人都直飞啊，中转地也要做检测是最坑的啊，举个例子，从英国回，在

中东 6 小时中转，您来给我展示一下如何在这么短的时间里在一个人生地不熟的地方从机场跑到检测点做完所有检测并拿到检测报告？在地球上哪个国家能做到？

5. How many countries in Europe and the United States can give out the test report within 48 hours? There are few places that can perform the IgM test. Where to get tested in the transit country when you only stay there for three or four hours? No one says the policy should be loosened so as to allow a large number of people to come back to China, but right now there is a fixed number of international airlines, isn't it enough to quarantine people right after they entered the country?

5. 欧美能有几个 48 小时可以出报告的，检 IgM 的地方也很少，中转第三国只停留三四个小时，去哪检测。没人说要放宽政策让大量人员回国，但是现在国际航班数量固定，入境直接闭环隔离，还不够？

6. This is the consequence of not considering the feasibility of implementation. The requirement of direct flights: double-negative certificate within 48 hours, and a whole day spent on the embassy to get the report (this may be feasible). The requirement of airplane transits: one needs to be approved to conduct the double-negative test in the third transit country, however one cannot enter the transit country because the country is only for transit, and one cannot be permitted with a visa to enter the country. Does this also count as low efficiency of other countries? (Many countries have no direct flights to China) This is China not wanting you to come back.

6. 这就是不考虑可实施性的后果，直飞要求：48h 双阴性证明，还要去大使馆用一天时间拿证明报告（这个或许还能行）转机要求：要在第三中转国出境做双阴性也要审批，然而中转国作为中转不能入境，也不给签证，这也算是人家国家政府效率低？（很多国家都没有直飞中国的飞机）这不就是祖国不让你回去

7. For those who asked that does it mean China should welcome them to come back any time? Yes, it should. This is the responsibility of the state, which is to overcome all difficulties to help its citizens come back home. I agree with the testing requirement, but the state should also try its best to help them solve problems, instead of making more difficulties for them while they are on their way home, like raising the air ticket price. This is truly a matter of interest.

7. 那些说祖国难道要时刻开着胸怀让他们回来？没错，就是应该这样。这是作为国家的责任，就是要排除一切困难尽力让他的国民回家。支持检测，但应该努力帮助解决困难，而不是在回家路上制造困难，比如高价机票这些，真的是利益问题。

8. Firstly, this policy is not just for foreigners, but both Chinese and foreigners. Don't say that it is only for people with foreign nationalities in the commentary section. There are many overseas students that cannot come back. Secondly, take Germany where I am in, for example, there are few places that can conduct the double-negative test and there are too many samples that are waiting to be tested. So it takes a long time to get the result, and it's hard to get the result within 48 hours. Should the new policy consider a bit about the specific situation in each country? It's not reasonable indeed.

8. 首先这个政策针对的不是外籍，是中外籍。评论里不要带节奏说什么移民。多的是

留学生回不了国。其次，这个双阴性检测，就我现在待的德国来说 能检测的机构少，样本多，出结果慢 48 小时出结果很困难。新政策是否该考虑一下所针对的国家的国情的确不太合理

9. Two certificates within 48 hours. It's really hard to achieve in most countries.

9. 48 小时内两个证明，确实对于大部分地区难以做到。

10. Most people don't even know what this policy means for those who need connecting flights to come back ... satire comments don't even know that starting from August and September, people need to do a nucleic acid test before boarding their first flight. The problem is that they need to do the test in the transit country, and many people don't even have the Schengen visa to stay in that country, and cannot go outside the airport to do the test. Many visa application centers are closed due to the outbreak and cannot provide any services. Those who need connecting flights can barely come back.

10. 大多数人根本不知道此政策对于要转机才能回国人员的意义...嘲讽热评可能都不知道八九月开始回国都会要求在第一程航班出发之前做核酸。问题是出在转机也要做核酸，很多人根本没有当地的申根签也无法滞留，无法去机场外做检测，疫情爆发签证中心都关门无法办法办理，基本转机的都断了回国路

11. I got my test in England, and both times I waited for the results for more than 70 hours. Not every country is efficient.

11. 在英国做的检测，两次都是 70 多个小时才出的结果。并不是所有国家效率都很快

12. The current return policy has caused no disease diffusion. And there is no possibility for the disease to spread right now, not to mention the medical pressure. This is the only policy in my knowledge that is based on sacrificing the interests of a small number of people. Overseas Chinese will truly feel sad. When there is a difficulty in China, they try everything possible to collect protective pieces of equipment and send them to China. However, now there are difficulties overseas, even though no one of them is being infected, all possibilities of them coming back home are cut off.

12. 现行的回国政策没有带来任何传播，也不具备传播的可能性，更别提什么医患压力。这是我认知里的唯一一个制定政策是以牺牲小部分国民的利益为前提的。在国外的人是真的很寒心，祖国有难的时候，想尽一切办法搜罗防护用品回国。但是国外有难了，在没有被感染的情况下，就被切断了各种回国的可能。

13. It's just people have different standpoints. The current testing requirement needs gradual improvements. This sudden announcement makes everyone panic and people start to look for clinics that meet the testing condition. Actually, everyone is not against the testing, it's just there are too many uncertainties. Once there is a problem, the airline will not refund the ticket. There are many overseas students I know who have already come back to China had purchased air tickets four or five times. Whenever there was a new policy, they became really nervous. And they have to come back because their visa expired.

13. 立场不同而已。现在这个检测要求还需要逐步完善，主要是突然公布出来，大家都慌了开始到处查符合条件的诊所。其实大家不是抵触检测，只是这中间种种变数太大，



如果一旦有问题误机航空公司是不可能退票的。我身边的留学生已回国的未回国的每个人都买过不下四五次机票，一有风吹草动就跟着紧张，签证到期不得不回。

14. Shouldn't this policy be further refined? We understand the government wants to control the pandemic, but it shouldn't use this one-size-fits-all approach. It should consider the practical implementation of the policy and different situations faced by different groups of people overseas.

14. 这个政策真的不需要更细化一些吗？明白是为了控制疫情，但是也不能几句话就一刀切了所有吧，还是得考虑政策的实际操作和不同海外群体的实际情况。

15. It is good to be rigorous, but should also consider the local situation.

15. 严格点是好。但也要考虑当地情况吧。

16. I can only say that the way back home for little buddies studying in Europe and the United States is really full of difficulties. They need money and need to plan their routes carefully and need to get air tickets. For those who got their tickets a long time ago but cannot go home now, although it's unfair, they have to find a way to do the test. Everyone needs to be considerate. It's also not easy for everyone to fight against the disease collectively, and not easy for overseas buddies to come back home.

16. 只能说欧美留学的小伙伴们，回国路真的有点难，需要金钱和好好计划路线并且还要抢的到机票，之前抢到了机票但是不能回家的伙伴们就只能委屈你们一下去想办法做检测了，大家都需要体谅啊，国家的大力抗议付出不容易，伙伴们回国也不易啊。

17. Many overseas students cannot graduate until December. If they have a steady job overseas, who would choose to go back home at this very moment and suffer? Most of their visas are about to expire and some of them have already booked air tickets and returned their apartments. If their flights are delayed, they will have no place to live, and will need to spend extra money on accommodations, and will have to purchase air tickets again and cannot board the connecting flights as well. You have to experience all these to have the same feelings. It's really miserable.

17. 留学生好多是 12 月份才毕业的呀，如果说在国外有稳定工作了，谁会非得趁着这时候回去？给自己也找罪受呢？大部分都是签证要到期了，而且有的好早就定好机票了，房子啥的都退了，到时候飞机延误没有地方住了，住宿还有生活又是一笔开销，完事机票还得重新买，中转的也飞不了了。确实得经历过的能体会，还是挺惨的。

18. Some people do not understand at all. It is unrealistic to do the test in the transit country. That means people living in the regions like South America and parts of Europe where there is no direct flight cannot come back at all.

18. 有些人根本没懂。中转国做检测根本不现实，就意味着没有直飞航班的，比如住在南美和部分欧洲非洲的人没法回来。

19. I am an overseas student as well and I understand the measure taken by China. But do you know that many overseas students who have bought air tickets and plan to go back at this time are different from those in March and April? Back then they were not allowed to come

back because they were considered to be people who would spread the virus. They chose not to come back and waited overseas until they graduated. Now they have finished their graduation thesis defenses and returned their apartments and cannot apply for visa extensions anymore as their visas are about to expire. But now they encounter such a thing, don't you think they may feel wronged? You guys have already come back, so you have different standpoints now. Don't represent other overseas students anymore.

19. 同留学生，理解国家做法。但是你知道这个时候很多买了机票准备回去的留学生和三四月份的时候不一样吗？当时不让他们回国，说人家万里投毒，人家不回，呆在国外等毕业。现在毕业答完辩退了房，居留也快到无法续，突然又遇上这样的事情，他们不委屈吗？你们已经回国了，立场就不同了，你们就不要代表其他留学生了。

20. It is no problem to ask overseas citizens to provide the test certificate, but shouldn't the state consider the feasibility? Like to provide Chinese citizen testing stations in airports located in major cities. What makes overseas Chinese angry is not asking them to provide the certificate but the infeasibility for them to provide the certificate.

20. 提供检疫证明没有问题，但国家是不是应该考虑一下可操作性？比如在大城市机场提供中国公民的检测点？让海外中国人生气的不是提供证明，而是想提供却没法操作

21. Haven't overseas students sent relief materials to China when China was suffering from the pandemic? I think the 14-day quarantine before can already guarantee the safety of the domestic citizens, but now I can't even get this double-negative certificate in England now. I think it's even harder for many overseas workers who are living in Pakistan and India.

21. 中国疫情的时候留学生没往国内寄物资？觉得之前回国隔离 14 天已经能保证国内人民的安全了，现在弄个双阴我在英国这边都做不到，好多去巴基斯坦啊，印度啊援助务工人员我觉得他们那更够呛。

22. I was an overseas student before, and I can understand the dilemmas faced by both sides. People in China have made huge efforts to have finally controlled the pandemic, but now there is a second wave of the pandemic outside the country. It is absolutely no problem to have such a strict policy in order to protect 1.4 billion Chinese people. But from the perspective of overseas students, there are too few countries and airports that can conduct double testing within 48 hours, not to mention there are fewer direct flights. And the price of air tickets is so expensive. They are anxious enough already and now they are even more anxious than before. It's hard for both sides.

22. 之前也是留学生，能够理解双方的难点。国内的大家花了大大的努力才控制住疫情，现在国外疫情开始第二波爆发，为了 14 亿中国人严防死守的政策完全没有问题。但是站在留学生的角度，能做到 48 小时双检测的国家和机场实在太少了，直飞的飞机更少了而且机票又很贵。本就焦虑不安，一下子就更焦虑了。双方都难

23. The Americans on the infected cruise ship docked in Japan were picked up by the U.S. government on a special plane. As for the Chinese people who are staying abroad for different reasons, although I don't know if you are infected, don't come back. China worries about the infection. But what's the fact? Test before boarding + test after getting off the plane + 14 days of concentrated quarantine + 7 days of community quarantine has in theory caused

no disease diffusion. Therefore, is this new policy truly made for better protection or for somebody's political performance?

23. 日本停靠的被感染邮轮上的美国人，由美国政府出专机接回。在国外由于各种原因漂泊的中国人，虽然不知道你们有没有被感染，都不要回来了，怕传染。然而实际呢？上机检测+下机检测+14 天集中隔离+7 天社区隔离。理论上和实际上都没有造成传播。所以这个政策真的是为了更好的防范还只是个别人想要的政绩？

24. There is nothing to blame China for. I can understand the reason behind this policy made by the state. And people should do the test for the sake of the state, citizens, and frontline medical staff. However, there is indeed something unreasonable about this policy. I am barely stating the fact that people cannot come back due to the short transit time, or the lack of direct flights but only connecting flights. There is no need to spread the hatred in the commentary section, as everyone has their own difficulties.

24. 没什么好怪国家的，能理解国家出这个政策的原因，可以为了国家、公民、以及一线的医护人员去做这些检测。可是这个政策确实也有不合理的地方，中转时间短的，或者没有直飞只有中转航班的，确实就是回不去了，这是在描述事实。评论大可不必宣扬仇恨，大家都有自己的难处。

25. Let me explain what a double-negative certificate means. From Milan to Shanghai, Finland is the transit country. It takes several hours to transit, and you need to provide the 48-hour nucleic acid test and serum test results before the departure from Milan (This phrase is doable as you can choose to do the test in a rather smaller city), and then you need to provide the 48-hour nucleic acid test and serum test results before the departure from Finland, and it's impossible to do so as most of the transit time only has 2 hours.

25. 科普一下什么是双阴性证明，米兰飞上海，中转芬兰，中转不可入境，中转时间几个小时，你需要提供米兰起飞前 48h 的核酸血清（这段不是不了实现，去较小的城市检测就可以），然后你需要提供芬兰起飞前 48 小时的核酸血清，这对大部分转机时间只有 2 小时的人是绝对不可能实现的。

26. Here is the problem! The country introduced this policy in order to tell you that it is not the state that does not want you to come back, it is because you cannot get the certificate so there is nothing the state can do about it. The responsibilities are all on overseas students. I totally support the state's anti-disease policies, but this one, really not. Might as well just cancel all the flights now, and resume the flights and ask for a nucleic acid certificate when the pandemic situation is better overseas. You really don't know how hard it is to get the IgM certificate.

26. 问题就在这里！国家出台这个政策，为的就是说，不是国家不让你回家，是你自己拿不到证明回不来，国家也没办法。就把所有责任抛给了留学生。我完全支持国家抗疫政策，但这个，真的，不如直接说取消航班，等国外疫情好转再慢慢恢复航线，提供核算证明。你是真不知道 IgM 证明有多难。

27. It is indeed unrealistic to ask for the double-negative certificate within the flights' transit time, even in China. If it is from the U.S. - South Korea - China, then not only do I need to do the test in the U.S., but also in South Korea, and need to get the test results within a few hours

of transit time, and even in Beijing, it takes 24-48 hours to get the test result. That means if you only have a few hours of transit time then your air tickets will all be invalid. So the flights that can meet the requirement are insufficient. I want to ask how many people can just easily pay fifty thousand to buy an air ticket?

27. 转机时间内双阴检测目前的确就是不现实，即使在中国。如果美国-转韩国-中国，不仅需要在美国还需要在韩国做检测，我就要在转机的几小时内拿到结果，而北京检测核酸都需要 24-48 小时。也就是说这种转机几小时的航班全部作废，因此能飞的航班供不应求。试问有多少人能随便拿出五万块钱跟没事儿人似的买张机票？

28. The requirement for people to come back to China is not consistent all the time. From the five-one policy to the 14-day healthy code check-in, 120-hour nucleic acid test negative-certificate, 72-hour nucleic acid test negative-certificate, and now the 48-hour double-negative certificate, it's getting harder and harder to come back to China. Overseas students are also Chinese citizens, and their lives are miserable in other countries during the pandemic period. I don't expect that you can offer much help, just don't always treat them with hostility, give them a hard time, and criticize them.

28. 回国的要求不是一直不变的，从五个一政策、14 天健康码打卡到 120 小时核酸检测阴性证明，再到 72 小时核酸检测阴性证明，再到现在的 48 小时双阴性证明，回国的难度一直在加大，国外的留学生也是中国人，疫情期间在异国他乡的生活困难重重，不求你们提供多少帮助，但求别总是敌视、为难和苛责。

29. I wanted to go back in March, but I was told it would cause trouble to the country, so I didn't go back, and I stayed here until graduation in September. The airlines didn't resume until September so I began to buy the air tickets. But who would have known that there was another outbreak in October? My flights got canceled three times and I eventually changed my flights to November 7th. I can understand that the policy is becoming more strict in order to protect the country and our safety during the trip. But the requirement of a second test in the transit country basically means that people like us who live in the country with no direct flight can give up going back.

29. 3 月份就想回去的，因为说会给祖国造成负担就没回了，坚持到 9 月毕业。爱尔兰 9 月份才恢复正常航班，就开始买机票了，谁会想到 10 月开头又开始爆发了？买了 10 月份的被取消了 3 次最后改到了 11.7 号。收紧政策是非常能理解的，保护国内和我们途中安全。但是中转国二次检测等于像我们这些没有直飞的国家，别回去了。

30. The commentary section is vicious. Do you know how many people in South Africa are overseas employees who went there to help out the one-built-one-road project? And now there is no direct flights, and it only has a few hours for flights transit. It's totally fine to do the double testing at the departure country, but how to all these: leave the country + get the test done + get the permission from the embassy within a few transit hours? Isn't it more likely to be infected running here and there than just sitting in the airport with the protection gear waiting for the connecting flights?

30. 评论区恶意太重了，你们知道南美非洲多少都是公派驻外去建设一带一路和走出去战略的，回国只能中转没有直达，中转只有短短几小时，出发地做双检完全没问题，但是中转几小时如何实现出境+检测+申报大使馆批准？如果出境跑来跑去是否比穿着防

防护服静静地在机场等中转，被感染可能性更大？

## University Students Graduation Policy

[Ministry of Education: Resolutely cancel the "clearing examination" behaviors such as make-up examinations before graduation of university students] A few days ago, the Ministry of Education issued a document which requires that universities should take the examination of university students and the graduation of university students seriously. Universities should strengthen examination management, maintain examination discipline, and resolutely abolish "clearing examination" behaviors such as make-up examinations before graduation of university students. "Clearing examination" refers to one last examination opportunity offered to university students who have failed the final examination of a course and have failed the make-up examination of that course later on as well and are not allowed to reselect that course anymore. Some universities stipulate that if the student has also failed the clearing examination, then the student cannot receive the diploma.

【教育部：坚决取消本科毕业前补考等“清考”行为】日前，教育部发布文件要求，严格把关大学生考试和毕业。加强考试管理，严肃考试纪律，坚决取消毕业前补考等“清考”行为。“清考”是指大学一门课程结业时，学生若期末考试没有通过或后期补考没有通过，但学校又不允许学生重修，则学校在毕业前再给学生一次考试机会。有的学校规定，如果清考也未通过，就不能取得毕业证。

### *University students graduation policy emotionally-agreeing comments*

1. Why go to the university if you are using your parents' hard-earned money but not studying hard!

1. 拿着爸妈的血汗钱不好好读书干什么去大学！

2. You are paying this little tuition fee while enjoying so much resource, and god knows how much the state has compensated your education. If you think you can still have your diploma by playing video games and skipping classes every day, you are being naive.

2. 交这点学费，享受这么多资源，国家不知道补了多少，天天打游戏逃课还想要毕业证，想得太美了点。

3. You don't study and just muddle through, yet you still want the whole society and the whole country to accompany you?

3. 自己不学在那儿混吃等死，还要整个社会国家陪着你？

4. Those who failed the clearing examination deserve it.

4. 那些清考都不过的就是活该

5. It is time for you to work hard but you think you have reached the destination. Skipping classes, playing video games, and so on. If you do so then just wait to work for others. Really stupid!

5. 到了真正该拼的时候，却以为到了终点，翘课、电子儿等等，等着给别人搬砖吧。

真是蠢到家了！

6. Study hard, work hard

6. 好好学习，好好努力

7. One should be eliminated if one does not study hard.

7. 不好好学就应该被淘汰

8. Should start to work hard

8. 该好好努力了

9. Rank and yank, agree!

9. 末尾淘汰，支持！

10. Interesting. Shouldn't fall in university.

10. 有意思，不能在大学堕落了

11. University is not a place for fun. It's not easy for your parents to earn money.

11. 上大学不是吃喝玩乐的。你爸妈挣钱不容易

12. Should be more rigorous. Most of the bachelor's degrees are unqualified. Enrolling in the university practically means graduating from the university with certainty, which is too simple.

12. 该再严格一点。本科学历大多数太水了，进了大学就等于出了大学。简单了吧

13. Must carry on this policy in order to save those students who are leading or about to lead a befuddled life.

13. 一定要这样执行下去，挽救那些正在或准备醉生梦死的同学。

14. I also think this is necessary. You are wasting four years at university. Would you still fail your examination if you actually attend the class? There are points for class participation but you don't want them, then what do you want?

14. 我也觉得应该这样。大学四年让你荒废，你去上课考试难道还不能及格？平时上课有学分还要闹哪样？

15. You can't learn well, and you can't even pass the basic standard, why should you graduate?

15. 没学好，最基本的都过不了，凭啥毕业。

16. There is no secured job even if you have a university degree.

16. 上大学也没有铁饭碗

17. Those who cannot meet the requirements should not be allowed to graduate.

17. 不达标的都不该毕业

18. As a person who has not failed a single course, I a hundred percent support this policy.  
18. 作为没挂过科的我对这个政策一百个支持
19. Support! This is called being ignorant and incompetent!  
19. 支持！这叫不学无术！
20. There are many students who are leading a befuddled life.  
20. 混吃等死的学生多了。
21. Should have done it earlier. Those high school students are suffering while those university students are acting like losers.  
21. 早该如此。弄的那些学生高中要死要活，上了大学却跟废柴一样
22. It's a good thing to give those who are leading a befuddled life and playing video games for four years some punishments. This is my personal experience.  
22. 那些混吃等死游戏四年的颓废学生而已，给一点处罚对他们来说是好事，过来人经验所得。
23. This is good.  
23. 这样挺好的
24. If you cannot pass the clearing exam, you have wasted four years of the tuition fee. Don't be a university student anymore. Just go back home and sleep.  
24. 清考还过不了，那你枉交四年学费，当什么大学生，回家睡去
25. Students who lead befuddled lives are everywhere. They sit in the classroom but play video games. When the class is over they go back to the dorm and keep playing games. They don't even go to the canteen. Except for the breakfast, they use food delivery services for their lunch, dinner, and night snack.  
25. 混吃等死的学生在哪都有，哪都不缺，上课在教室坐着玩游戏，下课回宿舍躺着玩游戏，饭堂也不下去了，除了早餐其他午餐晚餐宵夜都是美团饿了么。
26. I think this is good. I led 5 classes last semester, and the students in one of the classes didn't listen to the teacher while having classes so they failed several courses. This semester when we informed them to come back to have a make-up examination, they did not come back. We asked them why and they said they cannot pass the exam anyway, might as well wait for the clearing exam. They dare us to not let them graduate.  
26. 我觉得挺好。上学期带了5个班，其中有一个班学生上课不听讲，期末挂了好几个，这学期通知他们补考都没来。问原因，说反正也过不了，还不如直接等清考，还能不让我毕业吗？
27. Good thing. I support. If you lead a befuddled life, you are wasting the state's resources! You should just go to work.

27. 好事，支持，混吃等死还不如去打工，浪费国家资源！

28. Should really regulate it.

28. 真的需要管管了

29. Many students have degenerated.

29. 大学生好多都堕落了

30. What I worry about the most is that many students who lead a befuddled life, don't pay attention to their studies, and have unsatisfied grades will say that it is hard to graduate.

30. 最怕有些人天天在学校混吃等死，学习不上一点心，然后成绩低得要命后说一句大学毕业真难。

### ***University students graduation policy analytically-agreeing comments***

1. How come failing the class becomes something to be proud of? Everything is not easy. Don't blame everyone and everything but not yourself when encountering some difficulties. Why don't sacrifice something if you really want a good outcome? Ask yourself if you are truly responsible for yourself.

1. 挂科怎么就成了一件骄傲的事情？任何事情都难，但凡没有一点不顺心就要怨天尤人吗？为什么想要好的结果却又不为此付出什么呢？看看到底自己有没有对自己负责。

2. Most people have nothing to do with the clearing examination. There are make-up examinations. Only a few people can't pass the make-up examination. So I support the cancelation of the clearing exam. For those who do not want to learn, we have saved human resources, material resources, and financial resources. For those who truly want to learn, this policy has motivational effects on them. They will then work hard in order to graduate.

2. 大多数人哪怕不毕业清考跟他也没关系吧。毕竟还有补考，补考都不过的那是真的不学，挺支持取消清考的。对于不学的人省去了学校的人力物力财力，对于学的人真的是有刺激效果的，真的会为了毕业很努力。

3. No matter at what university, there are students who lead a befuddled life. They do so because they think they work hard in high school and it's time to relax at university because university won't regulate them. I remember my first at university was to use CAD to draw a picture. If I don't go to the library and study how to do it myself, who would help me? It depends on you whether you are useful or useless.

3. 不管任何大学，混吃等死的都有，有的人高中辛苦考上大学觉得可以放松了自由了，所以变得这样，因为大学不会束缚你，记得第一节课作业就是就让你用 CAD 画张图，你自己不去图书馆学谁教你？是金子还是粪水取决于自己。

4. You won't fail at university if you can just work half-hard as you work in high school. Those who failed by their teachers are usually those who do not pay attention to class, who don't come to the class, and who don't review before final exams. I heard that it's not good for professors themselves if they fail too many students. So, to be honest, if the university you're



at has a high failure rate that makes you study hard for several years, you won't regret when you graduate and enter the job market. This is a suggestion from me, a new graduate student who is now looking for a job.

4. 拿出高三一半的态度来对待大学的考试，都不是容易挂，老师一般挂的是那种平时不认真听课，逃课，期末还不认真复习的人。听说老师挂的学生多了他们也要受影响。讲真，你们学校如果考试挂科率很高，自己认真的学了几年，出来找工作你绝对不会后悔的，这是作为正在找工作的应届生对你们的忠告。

5. I am from a 211 university, and we have make-up exams and we can retake courses until you pass all the courses and exams. Do you have to wait until clearing exams? Some people think that there is a clearing exam anyway so they don't work hard, and they don't even go to the make-up exams and don't retake any courses. Besides, there are attendance credits if you retake the courses. Unless you don't even go to the class.

5. 我是 211 的，我们有补考和重修，重修不过也可以再重修啊，直到你过了，一定要等清考吗，有些人就是觉得有清考才不努力，连补考重修都不去，再说重修是有平时分的，除非你不去上课。

6. I think (the clearing exam) has nothing to do with whether you can graduate as long as you go to the class regularly. Pay some attention to your class and you won't end up with the clearing exam...Allow me to say this, but, if you need a clearing exam, then it means you're playing all the time during your university time. Don't normal students graduate on time? Besides, canceling the clearing exam does not mean canceling the make-up exam, can't you just pass the make-up exam before you graduate? Is it so hard to do?

6. 我觉得和毕业与否无关，只要你正常上课！用点心，都不至于要清考……要到清考的地步，恕我说句话，那你的大学怕是一直在玩吧。一般正常人不是都能顺利毕业？再说了取消清考又不是取消补考，只要在校期间补考重修过了不就行了？有那么难？

7. Honestly speaking, your motivation for learning should not be promoted by your professors but by your self-discipline. The system in university is like that, professors won't spend much time on you because they need to do research and work hard to get promoted. Nevertheless, how badly could you perform, how careless could you be to need a clearing exam?

7. 讲真的，大学已经不是靠老师来激发你上课的积极性了，完全靠你的自觉性，大学体制就这样，老师为了评职称做科研不会在教学上花费很多精力，但是无论如何，你是混的多差，期末有多不认真，你才混到需要清考程度呢？

8. China's university graduation rate is number one in the world. Go look at those high-ranking universities in the world, none of them have such a high graduation rate. If there is no elimination system in university, then it is not a responsible education. Bad money drives out good money. The job market will also be very disappointed with university education!

8. 中国大学毕业率世界第一，去看看世界一流大学，没有一所大学毕业率这么高。如果大学没有淘汰，就是不负责的教育，劣币驱逐良币，就业市场也会对大学教育失望透顶！

9. I remember that roughly 40% to 50% of the grades are taken up by the class participation. There are few university students who have self-discipline. They lie on the bed all the time and play games. They order food delivery when they are hungry. If there is nothing important, they won't go out at all. This policy is to regulate these students. For those who do not truant and who do not fail the class, this policy will not affect them.

9. 记得成绩有百分之 40 还是 50 的分都是算在平时到课率上面。现在大学生能自觉自律的都少部分了，天天躺床上玩游戏，饿了叫外卖，要不是什么重要事件可以一整学期都不出门的。这个政策也是为了整治这些人，不旷课就不会挂的看到这条可以说对他们并没什么影响。

10. I am a stakeholder as I am also a university student. Our university has canceled clearing exams (our university will give students one chance to take the make-up exam and two chances to retake the failed courses). If you didn't pass the exam, then I am sorry but you don't deserve the diploma.

10. 利益相关我也是大学生一枚，我们学校就取消了毕业清考（我们学校会给一次补考，两次重修机会）如果你没过，对不起那真的说明毕业证不属于你。

11. It's not like the make-up exams and retakes of courses are being canceled. Those who cannot graduate until clearing exams are students who are lazy and muddle along. I think there are too many universities in China decreasing the value of graduate students, producing too many lazy students. The state should develop vocational education and specialist education, and further improve the social recognition of education quality. Students should learn some practical skills instead of muddling through four years of university study.

11. 又不是取消补考和重修，等到清考才能毕业的人就是懒和混，我倒是觉得中国的本科学校太多了，导致含金量太低，混子太多，应该大力发展职业教育和专科教育，进一步提高社会认可度。大学那四年混着过，还不如去学一技之长。

12. One thing that can be sure of is that it's not all teachers' responsibility if students can't learn well. University students need to have a certain level of self-discipline. You can only say teachers who muddle through are somewhat irresponsible, but you can't say they have done nothing. They are different from those who skip classes for no reason.

12. 有一点是可以肯定的学生学不好不能全责怪老师，大学生要有一定的自学能力，混课的老师只能说不负责，不能说不作为，跟无故旷缺还是要区别的。

13. I remember reading an article while I was at school which introduces West Point. I remember one sentence clearly that says, West Point Rules Number two, there is no excuse. Don't seek excuses to fail but reasons to succeed!!! This sentence has always been my motivation to persist. If you don't work hard nobody will make way for you! Best wishes to every university student, fighting!!

13. 记得上学时候看过一篇文章，介绍西点军校的，记得最清楚的一句话，西点军校校规：第二章 没有任何借口。莫找借口失败，只找理由成功!!! 这句话一直是我坚强和坚持下去的动力！你若不努力，没人给你让路！祝福各位在校的同学们，加油！！

14. I advise university students don't muddle through. Study hard, or you will regret it.

14. 劝在校大学生，不要得过且过，大学期间要好好学，不然出来后会后悔的

15. The problem with the Chinese educational system is that there are many limitations. As a country that has the largest population in the world, the education system cannot pay attention to every single student and the differences among individuals. In foreign countries, one class only contains a few students, which is impossible in China as it requires a lot of educational resources. Those who say that they don't want all-around development but specialist development, why not go to vocational schools? The state is already trying its best to improve the education system to reach its full potential step by step.

15. 中国的教育问题在于很多方面，受到很多限制，作为世界上人口最多的国家，没有办法完全的关注到每个学生的个性差异，完全的照顾到个人。国外是几个人一个班级中国是不可以的，会需要很多的教育资源。那些说不想全面发展，想发展优势的，你去专科不好嘛？国家在尽可能完善教育，根据国情一步一步改革做到最优教育。

16. This is good. It's not safe anymore once entered the university. If you don't work hard, you will be eliminated either by the university or by society. I support.

16. 还是挺好的，进了大学门不是就安全了，不努力的话不在学校淘汰就是在社会淘汰。支持

17. Appropriate measures should be taken for the future of national education.

17. 为了国家教育的前途应该适当的采取措施

18. Clearing exams are not make-up exams. There are loopholes in this system anyway. Some students muddle through for four years, and they want to graduate using clearing exams. Some students fail a dozen of courses and they wait for the clearing exams to write off.

18. 清考不是补考，本身这个制度就有漏洞，有的人大学四年天天混，最后想靠清考上岸，有的人才能攒十几门挂科最后靠着清考

19. I wonder what kind of universities do some of those commentators go to? Why do are so object to the cancelation of clearing exams? Why blame the teacher when you are the one who is being so lazy? We have one or two teachers who just read PPT, but we managed to study ourselves and it won't affect the exams. Some courses are not core courses, so the teachers do care that much and are very generous about the grades.

19. 我在怀疑前面很多人上都是什么学校？居然对取消毕业清考这么反对？难道他们经常挂科？那不是自己懒嘛，还怪老师。我们也有一两个老师念ppt的，但是自学完全不影响你考试，甚至有些因为是不重要的专业课，老师上的不用心改成绩也会很宽松。

20. I just graduated, and our university does not have such thing as clearing exams. We can graduate as long as we listen carefully in class, take notes, and submit our assignments on time. If we can't pass the final exams, there are make-up exams. If failed again, we can retake the courses. Clearing exams make graduation cheap.

20. 刚毕业，我们学校就没有清考，只要认真上课了，做好笔记，按时交作业，都能毕业。正考过不了，还有补考，补考过不了还能重修，清考让毕业变得廉价。

21. In fact as long as you study hard, you basically won't fail the exam.

21. 其实认真学基本不会挂科的

22. Easy-way-in and hard-way-out is reasonable.

22. 宽进严出有理

23. Very good. Of course I support it. Nowadays university students' lives are beer and skittles. University students are generally too indulgent and learn nothing. China's future relies on these generations, and it's not ok for them to be muddleheaded.

23. 很好啊，当然支持，现如今大学生活就等于吃喝玩乐，大学生们普遍在大学期间过于放纵，导致没学到什么东西，中国的未来是这些年轻人去创造的，浑浑噩噩的可不行。

24. First of all, there are make-up exams if they failed the final exams. And there are retakes of classes if they failed make-up exams. If you work slightly harder, you won't fail the exam. It's truly responsible to cancel the clearing exams for those students who do nothing, who don't even go to the make-up exams and don't retake courses but just wait for the clearing exams.

24. 首先，挂科了有补考，补考还不过有重修，除非你是大四才挂，大学里稍微努力一点都不会挂科，天天混饭吃的学生练补考重修都不去就等着清考，取消才是对他们负责。

25. Hard-way-in and hard-way-out is good for the nation and people and is responsible for students.

25. 严进严出利国利民利社会更是对学生负责。

26. Good thing. Hard-way-in-and-hard-way-out is what universities should be like.

26. 好事，严进严出，才是大学应该有的。

27. I think this policy is made for those students who do not have enough credits, and who still lack credits even after retaking the classes. Easy-way-out will only make you regret when you start to look for jobs.

27. 我觉得这是对学分不够，重修之后依旧不够的人设定的吧，宽出以后，到你找工作的时候真的会后悔。

28. It should be easy-way-in-and-hard-way-out. Easy-way-in-and-easy-way-out makes most of university students learn nothing after four years. Only hard-way-out can truly improve the skills and quality of university students.

28. 就应该宽入严出，宽入宽出，大部分本科学生本科四年根本学不到什么东西，只有严出才能真正提高中国大学生的技能以及素质。

29. Most of the students as long as they go to class regularly, have a good study attitude, will not end up with the clearing exams. I have graduated anyway, and those who went to clearing exams in my class were students who did not go to class at all and they did not even go to the make-up exams.

29. 大部分只要正常去上课，态度良好。都不会沦落到清考吧。反正我毕业时，我班清考的，都是平常上课都不去，补考也不去的人。

30. I think if you go to the class regularly you can pass the exams? After all, there are 30 percent attendance credits. Whether you can pass the exam does not entirely depend on the final scores of your exam but also some scores given by the teacher...You can pass the exam by just finishing some basic parts. If you fail once in the final exam you can pass the make-up exam for sure.

30. 我觉得只要平时有好好去上课的都能过吧？毕竟还有百分之 30 的平时分啊。能不能过又不是全看考试成绩，还有老师给分...只要把基础的一写，都能过了。一次没过的，补考必过。

### ***University students graduation policy emotionally-disagreeing comments***

1. I am most annoyed by teachers who just repeat what the book says.

1. 大学最烦照着书本念的老师

2. I beg you to let teachers pay more attention to the teaching. I will study hard if they don't just simply read the PPT. Although personally, I have failed no course.

2. 求求你们先让老师好好讲课吧。别念 PPT 我肯定好好学。虽然一科也没挂过

3. Please get rid of those low-quality courses so that I can study the professional courses well.

3. 那麻烦先把水课都去掉，让我好好上专业课

4. Pleas also handle those teachers who only know how to read PPT in class.

4. 上课念 ppt 的老师也处理一下

5. Strongly oppose letting students study themselves. For those teachers who let their students study themselves if students can learn well by themselves, why need teachers?!

5. 坚决抵制让学生自学。让学生自己上课的老师 学生能自己学会要老师干嘛？！

6. You don't give students a diploma after they pay so much tuition fee?

6. 交那么多学费，不给毕业证？

7. What have we done wrong? You have already graduated and now you want to give us a hard time?

7. 我们做错了什么，你们毕业了使劲欺负我们这些在校生？

8. Students won't be bored, won't play cell phone games, and won't skip the class if the teachers are knowledgeable enough and teach the class more interestingly. Whether students can pass the exam does not depend on whether students want to pass the exam but whether the teachers want the students to pass the exam.

8. 讲的但凡有点意思，教师自己肚子里有点东西，学生都不会无聊玩手机旷课。考试不是看学生想不想及格而是老师想不想让你及格。

9. The teaching quality in universities isn't that high. Teachers leave right after the class, and you can't find them beyond the class time. And there are teachers who just read the textbook, who read the PPT and cannot say more than a hundred words within a minute. We'd be so happy if we can meet just one good teacher.

9. 大学老师的质量也没多好啊，都是上完课拍拍屁股走人。除了上课时间就见不到人了。还有念课本的，念 ppt 的，一分钟读不到一百个字的老师。我们遇到一个好老师都开心得不得了了。

10. Interesting. How many dreams of students will be destroyed by this one-size-fits-all policy.

10. 呵呵。这一刀切得毁了多少学生的梦想啊。

11. Please filter out those university teachers who can only read PPT and textbooks in class first. If there are no energy and soul in the class, how can students learn and pass the exam?

11. 先把那些上课读 ppt 读资料的大学老师过滤下去吧。讲课没有活力，没有灵魂，学生怎么听的进去 怎么考试？

12. If so, the power possessed by university professors is even more, if they don't like you. After all, professors have the final say in final exams.

12. 这样的话，大学老师的权利提高更明显了。看你不爽就，本来大学里的考试就没那么，都是老师说了算。

13. What if you encounter a teacher we used to have? It's a selective course, and it's a closed-book exam. 50 out of 60 failed that class. We were told a range that would be covered in the make-up exam, but turned out what appeared in the make-up exam was beyond that range. I want to ask what can we do?

13. 要是遇到我们当时的老师，还是选修课，闭卷考试不说，一个班 60 个人，让挂 50 多个人，补考说给画重点，重点全部不考，我想问问怎么办？

14. Can you manage the teachers who read PPT and advisors who exploit students?

14. 先管好大学读 ppt 的老师跟压榨学生的辅导员行么

15. Why can't reform the teachers?

15. 为什么就不能也对老师改改革了？

16. Why everything is about students? What about teachers?

16. 为什么凡事针对学生，老师呢？

17. To be honest, university teachers lack the teaching attitude of high school teachers and middle school teachers. They leave right after the class is dismissed. How well students learn has nothing to do with them.

17. 说真的，大学老师最缺乏中学小学老师的教书育人态度，反正上完课我就走了，学生跟我有啥关系

18. Can you cancel the teaching qualification of PPT teachers?

18. 能把 PPT 老师资格取消了吗?

19. You give us a hard time when we have the university entrance exam, and you still give us a hard time when we are at universities.

19. 高考为难我们，大学还为难我们

20. I truly think that the regulation should start with the teachers. The exam is unfair for many people. Those students who work hard are replaced by those so-called "smart people", and they can't get any scholarship. Yet those teachers are not helping. It's unbelievable.

20. 真的觉得应该从老师监管这块抓起，考个试对很多人来说特别不公平，那些努力的孩纸被那些所谓聪明的人给顶了，奖学金啥也拿不到就算了，老师们还以身作则，真的是醉了。

21. You guys don't know how serious the culture of cheating in university exams is. Students who get scholarships by cheating are everywhere.

21. 大家是不知道大学考试作弊风气有多严重，靠作弊获奖学金的比比皆是

22. You think the quality of university teachers is really high? It's teachers' job to teach, but how can teachers only ask students to work hard while teachers don't do their job well? If students can do what should have been done by teachers, then why need teachers? Just fire them all.

22. 你以为老师质量就很高吗？教书育人是老师的本分，你连本分都没做好就来要求学生，学生可以做到老师本应该做的事情，请问我们为什么要老师？把老师都辞退吧。

23. Many courses are hard to understand even if you pay serious attention to them...perhaps I don't have enough IQ and I don't know why I chose STEM, and now I am so regretful. We have the statistics class and the optics class this semester, and some courses are really killing me.

23. 很多课也不是你认真听就能听的懂得.....我可能智商不够也不知道为啥当初跑来学工科，现在后悔死了，我们这学期开了数值分析和光学，有几门课真的就让我死去活来生不如死

24. Nowadays university teachers are muddling along. Especially those in the second and the third tier colleges. Should really investigate them. They do nothing and those colleges are doing something useless all the time.

24. 现在的大学老师太混了，尤其是一般的一本以及二本和二本以下的老师及学校，都应该严查一下老师混日子的情况，啥活不干，学校净整一些有的没的。

25. Can you raise the quality of teachers first? ... They don't stop reading PPT. And there are some teachers who do not teach but only brag about their life philosophy, and they also have a very twisted value system. So annoyed.

25. 能不能先提高一下老师素质...读 ppt 不止，还有的老师天天不讲课，吹水讲人生哲

理，三观也不正，憋屈

26. You can regulate students strictly, but you can't make the students' years spent at universities in vain. This is unreasonable. How sad it is that students spend many years at the university and get nothing in the end. Really don't understand the education system in China.

26. 你可以严格约束学生，但你不能让学生白白上的几年学不作数吧。这也太不合理了吧。学生用了几年时间在校上课，到头来啥也没有，那是多么的悲哀啊。真搞不懂中国的教育制度。

27. I surrender. You should just come to my university in person and see how and what those teachers teach. Easier said than done.

27. 我真服了。你亲自来我们学校上课，听听有些老师是怎么讲课的，上的是啥。真是站着说话不腰疼

28. One year has passed since our graduation and there is still a student in my class who did not get his/her diploma just because he/she somehow offended a teacher in his/her freshman year. Really miserable.

28. 毕业一年了我们班都还有人没拿到毕业证，就因为大一的时候得罪了老师，也是惨。

29. Please correct the behaviors of teachers before regulating the students. The upper beam is crooked and yet you want the lower beam to be right.

29. 请您先改好老师再来管学生吧。上梁不正您还要求下梁正

30. University teachers only read PPT and textbooks when they are teaching. How many teachers can act like high school teachers to use chalks to teach?

30. 大学老师上课读课本读 ppt，有几个大学老师跟高中老师一样拿着粉笔讲课的？

### ***University students graduation policy analytically-disagreeing comments***

1. A good education is supposed to let students learn, and it's not about how much teachers teach (just for the sake of progress). Students can apply what they learned only when they have actually learned something. If university students listen to their teachers reading PPT all day, then there is no difference whether they go to the university or not. It's just a waste of time. Might as well learn some practical skills.

1. 好的教育应该是让学生学到了东西，而不是老师教了多少（仅仅是为了赶进度）。只有实实在在的学到才能用出来，如果大学天天都是在听老师念 ppt. 那这个大学和不上是没有任何区别的，不过是在浪费青春罢了，倒不如学一项实实在在的技能

2. Different universities have different situations. In some universities, you can have final exams, make-up exams, and if you cannot pass those exams after you retake the courses you can have the clearing exams. However, some universities don't even have make-up exams. If you fail at the finals you will just have to wait for the clearing exams. My linear algebra teacher back in my university only knew how to read textbooks and she just copied whatever in the book to the blackboard. She cannot answer our questions as well and just told us to



take the final exam. There was no student who had a grade higher than 75 in the end even with the attendance credits being included.

2. 上的大学不一样情况也不一样，有的是期末，补考，一直重修不过最后还能清考。有的学校部分科目连补考都没有，期末挂了就等清考。我大学的时候线代老师讲课就是念课本，往黑板上抄书上例题。题不会问她，她也不会，期末直接告诉我们去考，结果全班成绩没有一个超 75 的，还是加了平时成绩。

3. To be honest, except for those majors that have research value, is it really necessary to have such a strict rule for majors like media study, business, management, and foreign language study? Many things are more than just theoretical knowledge but require practical experience. Besides, when you look for jobs, employers are not going to ask you the grade of your every final exam and the grade of your thesis! Firms are only going to care about what university you graduate from, what job experience and work experience do you have, and what ability do you have.

3. 说实话除了那些有科研价值的学科以为，像我们这种什么媒体、工商、管理、外语之类的学科真的有必要严苛吗？很多事情是在抛开理论之外的实践经验，其次找工作的时候也不会问你每学期都考多少分啊毕业论文多少分啊！企业一般只在乎你是哪所学校毕业的，有过什么工作经验实践经验和能力

4. Students and teachers should both do some thinking, and the universities should think more. Subjects arrangements are not scientific, and many subjects fall behind the times.

4. 学生、老师都反思，学校更要反思，科目设置不科学、许多科目都落后于时代。

5. I will graduate in the year 2020 and I am in my senior year. I think I have the right to speak up about the clearing exams. I did not fail one single course during my university time. However, last semester and this semester, I have a course called contemporary Chinese culture. There are 90 students in the class and 50 of them failed that course. 25 failed the make-up exam. I can't really understand the teacher of that course. Besides, our class has a pretty high attendance rate. Although there are a few students who do not have a good learning attitude, I think the problem of that teacher is also worth considering.

5. 我 2020 年毕业现在大四，对于清考这个问题应该有发言权吧，虽然我本人大学四年没有挂过科，但是上学期和这学期有一门中国现当代文化，班上一共 90 多个人，考试挂 50 人，补考挂 25 人，真的我有点理解不了任课老师，而且我们班到课率真的很高，虽然存在有同学态度不端正，但是我觉得老师也要重视吧。

6. Many problems universities have need to be reformed regardless of clearing exams or low-quality teachers. Should solve the essential problem not just problems appearing right now. For example, the physical test. Nowadays students rarely exercise. The first two years there are P.E. lessons but not anymore in the last two years. The physical quality of university students is so so. Even if they exercise a lot, it's possible that they also fail the physical test. Don't know if this kind of situation is a good thing or a bad thing for university students.

6. 大学存在的问题各方面都需要改革，不论学生“清考”还是“水师”等问题，认为尽量从根源上抓问题，而不是当下。举例，大学生体测，现在学生很少运动 大学前两年有体育课，后两年没有，体质就那样，达不达标难说。经常运动也不见得八百米能达标。这

种情况对于大学生来说不知是喜是悲

7. There is a loophole in this policy. I have a friend who cannot go to the final exam of one final subject because of an important job interview. So my friend can only wait for the clearing exam. When making this policy, have you considered the conflict between this policy and the rules of universities?

7. 这种做法有漏洞，有个朋友最后一门考试没办法去考，刚好招聘季有个重要的面试要去面，只能等清考，这个制度定之前有没有考虑到跟院校的制度有没有矛盾？

8. Although increasing the difficulty of graduating as well as strengthening academic specialization can raise the quality of university teachers. But anyway the burden is on our generation now. There is no way to monitor the quality of those senior university teachers but can only offer them more training. Eventually, it is our generation that is suffering. In the future, it's harder for us to graduate, and it's even harder for us to get a job.

8. 增强毕业难度和加强学术专业度，也就从根本上对大学讲师质量有更大提升，但归根结底提升还不是到我们这一代了？没办法对老资格老师进行把控了，最多就是再培训，辛苦的还是我们这一代人！以后毕业难，就业门槛提高了，也难的是我们。

9. What about those subjects that only have exam grades but no other way to get credits and what about those subjects that do not offer a chance of make-up exam? Shouldn't the implementation of this policy be associated with an appropriate teaching arrangement as well as the grading system? Isn't it problematic to simply cancel the clearing exam?

9. 那种只有考试没有其他给分形式，考试不过补考不给过的那种，怎么算，这种政策的实行是不是应该跟合理的教学安排，给分机制相互挂钩，这样强行的取消是存在问题的吧？

10. The intention is good, but this is not the best way to improve the quality of education.

10. 出发点是好的，但这并非是提高培养人才质量的最优方案

11. The courses are not decided by teachers, but the office of academic affairs can decide whether the course design is scientific and reasonable, whether the design can pass the university requirement and evaluation of the Ministry of Education. How many teachers are earning 3000 RMB but teaching hard at the front line? The phrase "selfless contribution" is not enough to provide support for teachers' kids and aging parents. The biggest problem is that teachers cannot teach in the university without concern!

11. 课程不由教师来定，一个叫教务处的组织就可以判定你是否上的科学合理，是否可以顺利通过学校要求和教育部评估，有多少老师可以拿着 3000 多工资站在一线稳定心情天天认真的组织课程？只凭一句无私奉献真的完成不了嗷嗷待哺的孩子的抚养和逐渐衰老的父母的赡养，教师不能安子在校园里教书是最大的问题！

12. A specific problem needs a specific solution. There are many problems existing in nowadays universities, including students who cheat in finals to get a high grade, people who ask for a high grade from professors just because they plan to study abroad after graduation, and those who ask professors for a high grade because they want to be selected as outstanding

students. Some students actually got 58, 59 scores in their make-up exams but some universities would change their grade to 60.

12. 具体问题具体分析吧。那些考试作弊整高分的，还有以出国申请为理由让专业老师提分的，班干部为了评优私联老师提分的，这些都是如今高校存在的问题。还有重修啥的老师就给 58, 59，而有的高校就会给把成绩改到及格。

13. The improvement of the assessment system is of course worth advocating. But this is not the essential way to improve education quality. On the other hand, improving teachers' quality is necessary. Not only students need to be assessed but also teachers, especially those teachers who do nothing.

13. 完善考核制度当然值得提议，但这不是提高人才质量的根本方法，另一方面还应该提高教师教学素质，不近要考察学生，更要对不作为的老师进行考核。

14. Students truly want to learn something, however, some teachers are always late for the class, and speak so slowly when teaching, and especially like to talk about something irrelevant to the class and try to cover three to four chapters at the final lesson. Many teachers are like that. Teachers do not value the class, so students won't value the class as well. Also, universities have a very low requirement for students. It's universal that students cheat in their final exams. Even if they get caught they won't fail the course anyway.

14. 作为学生确实想学一些东西，然而某些老师迟到早退，讲课节奏缓慢，特别爱讲一些与课程无关的东西，结果导致最后一节课讲 3 到 4 章的课程，这样的老师太多了。老师都对课程不重视，学生想重视也力不从心，其次学校对学生的要求太低，期末作弊现场真的很普遍，即便被查住也不会挂科。

15. Most of the students right now are under a lot of pressure. Of course, someone would say that if they can't bear the pressure now they will suffer more when they graduate and work in society. But each life stage is different. I hope that the reform can be more thorough, don't just target the students. Thanks.

15. 现在大部分真正的大学生都已经很有压力了，当然有人会说这点压力都承担不起以后进入社会怎么怎么样，但是各个阶段都不一样啊。而且希望改革能全面一点，不要只针对学生，谢谢。

16. Fundamentally, the current problem of Chinese universities is the education system. The problem cannot be solved by canceling the clearing exam. If teachers only repeat what the books say, adopting the duck-stuffing teaching style of high schools, the students would feel bored in the class and have no chance to think independently, and they only learn for tests. In this case, four years of university time is wasted!

16. 从根本上来说，中国大学目前的现状是教育制度的问题。如果只是用取消清考的方法来限制学生，也不能从根本上解决问题。如果老师只是照本宣科，还采用像中小学一样的填鸭式教学，学生上课觉得枯燥无味，也没有独立思考的机会，所学的知识只是为了应付考试 那大学四年的时光岂不是白白浪费！

17. Should not just punish students to motivate them to study hard. University students have an adult mindset, and they should be responsible for themselves. Society would punish those

self-abandonment students, but the university should issue them the diploma and give them more chances to retake the exams. If they fail once again then they can't get the diploma.

17. 不应该已惩罚学生来促使学生上进，大学生本都是未成年人有自己的思想，也要为自己的行为负责，自甘堕落的学生社会会来惩罚他的，学校还是应该按照能毕业发毕业证，不能毕业的给机会重考，再不过就不发学位证书。

18. But is it really necessary? I feel like the institution now is too rigid. Does everyone have to develop in an all-around way? What about those who are specialized in one aspect. I am just raising a question that I can personally relate to. Those who have a high GDP are not necessarily better than those who are more specialized and who are more diligent.

18. 可是这样真的有必要么？我觉得现在制度太僵化了，难道所有的人都得全面发展么？对于只想往一个方向精钻的人怎么办？在此我只是提出了一个自己亲身感受的一个问题。那些绩点高的并没有那么优秀，比这些人专业优秀、用心的人多了去了。

19. Although a policy is made for a good purpose, but the implementation of that policy always goes wrong. I heard that teachers said they must fail some students otherwise they cannot meet the requirements. I am so sick of formalism. We, the ordinary students, are who eventually suffering.

19. 出台一个政策，目的是好的，但往往在执行的时候出现偏差。我听到老师说按必须挂几个学生，不然她们交不了差，很反感形式主义，最后遭罪的都是我们这些普通人，普通学生。

20. Actually except for reforming the assessment system of students, can we raise the standard of teaching quality regulation and management? The foreign pattern which frees the universities from administrative procedures and institutionalizations should be learned by us so as to motivate the teachers. We can even try to marketize some universities.

20. 其实除了改革学生考评机制，是否能提高教学质量的监督管理标准，借鉴国外的模式让高校去行政化，去体制化，真正激发教师的能动性，甚至可以尝试部分高校市场化运行

21. Even if you make it stricter and don't allow them to retake the exams, you won't necessarily broaden the job market. There are popular and unpopular majors, and they are determined by the social trend. You can solve the employment problem by simply regulating students! Shouldn't we rethink the recession that causes unemployment? Or should we open up some courses that can enhance students' psychological tolerance for future unemployment? So that they won't have grandiose aims but puny abilities.

21. 再严格，不给补考，也不见得就改变出去就业面就能变广，专业就是有冷门和热门，而冷门/热门还跟社会趋势有关，这不是管控住大学补考，就能解决就业！是不是该反思是不是经济市场下行？或者开设一些讲课让增强学生的未来就业的心里承受力？避免出去，低的不做，高的做不了

22. It can't really solve the true problem. Universities want a good graduation rate so they would eventually lower the standard. Actually, should pay more attention to the teaching quality of teachers.

22. 解决不了真正问题，学校为了毕业率，也会降低考核指标的，其实更应该注意的是教师的教学质量。

23. As a student graduating from a normal university, I truly understand how much a teacher can influence a student. However, teachers in the universities, which are places for higher education, are the least earnest. A fixed salary and a useless assessment system are all the causes of university teachers' inattentiveness. Many professors focus on their own research and do not care about how much students can learn from the class. Our educational reform has a long way to go.

23. 作为一名师范生，真实地了解到一个老师对学生的影响有多大，但大学作为一个高等教育场所，老师却是所有学校里讲课最不走心的最随意的，拿的死工资和毫无作用的考评制度都是纵容大学老师漫不经心讲课的理由，很多老师在意自己的研究，而并不在乎学生能从课堂得到的收获。我们的教育制度改革，道阻且长。

24. I hope some faculty members who have been promoted to the associated professor or professor understand that the word "professor" originates from the word "teach". This is the difference between professors and researchers. The importance of research is not the reason and excuse. I hope that those professors do not use a perfunctory attitude to kill students' interests in their majors anymore.

24. 希望某些已评和正在评职称的老师明白，教授二字源于“传教授业”的字义，这是教授与研究员的区别，重科研不是轻教学的理由和借口，希望某些老师不要再用敷衍的教学态度磨灭一届又一届学生的学科兴趣。

25. I had a class previously which has no attendance credits and assignments but only a final exam. The teacher said there is no way for us to pass the make-up exam if we fail the final exam in the first place, and none of us passed the make-up exam. My class schedule was in conflict with that course schedule when I was in my junior and senior years so I couldn't retake that course. I had to retake the course next semester. I only failed that one particular course at my university, can you say that I didn't work hard? If you want to implement this policy, should you provide an associated credit-giving system and implement it strictly?

25. 我之前有一门课，没有平时分和作业，只有最后的考试，老师说考试不过补考不给出，然后我们补考的都没过，我大三大四因为课程冲突也选不了，我还得下学期选，我大学就挂这一门，你难道说我不努力吗？如果你要实行这个政策是不是相应的也要有相应的给分体系并且严格实施。

26. I just graduated and I believed in the state's policy. I dare to be the first one to try the crab. My university applies the rule of the same standards and same teaching quality and stipulates that if one misses three classes, regardless of whether one takes a sick leave or not, one won't have the chance to take the final exam. One needs to drop out of school if one's average score is below 75. However, we actually paid more money and we had no accommodation provided by the university. Didn't we sacrifice enough? Besides, why there is a master's program for the major of accountant? It's a major that should be associated with practices. Part-time accountant major is even so. Is it all wrong?

26. 我是应届毕业生，相信了国家的政策，敢于做第一个吃螃蟹的人，同一分数线，同

一质量，三节缺课无论是否请假，取消考试资格，考试平均分在 75 以下要退学，却花费更多，没有住宿，我们付出的少？再说了会计专业为什么读专硕，本来就是与实践结合的，非全更是如此，这难道是错了？

27. It's even more important to think about how to improve the teaching quality of university teachers. A good teacher can teach so well in his specialized area. But a bad teacher, even if he knows so much, could not convey his knowledge to students. Should not just use a one-size-fits-all policy. The key is teachers' teaching ability.

27. 怎样提高大学教师的教学水平更重要，好的老师可以把他擅长领域内的课讲的非常生动，不会上课的老师哪怕懂得很多也没办法传达给学生。不应该按照课程一刀切，老师的教学水平才是关键吧？

28. Although I have not failed a single course, I still want to say that it's not only those who do not study hard that will fail the finals. For students major in liberal arts, it's really painful to study advanced mathematics and linear algebra. If I was good at math, would I get a score less than 60 in the math exam of college entrance examination? Luckily my major does not require me to take math courses otherwise I would definitely fail them as well. And nowadays many universities including my university have canceled the make-up exam. If you fail the final, you can only retake the course.

28. 虽然我没挂过科，但是我想说其实真的也不全是只有不努力的人才会挂科，特别是你让一个文科生学什么高数线代真的很难受，我要是数学好我当初高考数学能连 60 都没有？好在我的专业不用学这些不然我真的也必挂。还有现在很多学校都取消补考直接挂科就重修了，我们学校就是。

29. Should think about how to innovate and improve teachers' teaching styles while trying to give more burden to students. Both sides should coordinate, and the depth and specialization of teaching content should be increased. Teachers should have true personal insights, and should not just repeat what the books say, and read PPT. Teachers should be funnier and enlightening so that students can pay more attention to the class and be more concentrated. Sometimes, it's not that students don't want to listen, it's just the class is so boring. What the teachers teach are all covered in the PPT ... .. And should also avoid the chicken soup style of teaching.

29. 增负的同时，老师的授课方式也应该要同步创新和改进，双方面应该都得协调进行，增加内容的深度和专业性，有真正个人的见解，还有上课不一定得照本宣科，按照书本和 PPT 照念，有拓展和生动有趣一点，这样才会专注和投入，有时候不是不想听，只是确实很无聊，而且 PPT 都有.....也不要陷入只讲心灵鸡汤

30. It's a big trend to reform education. University courses and exam-oriented education in high schools are actually a chain reaction. Education should be reformed as a whole and systematically. A reform of only one single aspect, regardless of how big the wind is and how fast the rain is, is only wishful thinking, and cannot avoid being affected by other aspects and will result in nothing.

30. 教育改革势在必行，大学的课程，中学的应试，小学的作业，其实这是个链锁反应，必须系统改，整体变。任何单环节的改革，无论风声多大，雨点多急，都是一厢情愿，

都避免不了被前后的链条拉入原轨，最终不了了之。

**Appendix 4: Questions and Coding of Control Variables & Pre/Post-attitudinal Questions**

<b>Control variable</b>	<b>Question &amp; Coding</b>
<b>Male</b>	<p><b>What is your gender?</b> 您的性别是?</p> <p>Male - 1 男 Female - 0 女</p>
<b>Age</b>	<p><b>What is your age?</b> 您的年龄是?</p> <p>Numeric</p>
<b>CCP member</b>	<p><b>What is your political affiliation?</b> 您的政治面貌是?</p> <p>CCP member - 1 党员 Non-CCP member - 0 非党员</p>
<b>Marital status</b>	<p><b>What is your current marital status</b> 您目前的婚姻状况是?</p> <p>In marriage - 1 已婚 Not in marriage - 0 未婚/离异</p>
<b>Education level</b>	<p><b>What is your current education level?</b> 您目前的学历或教育程度是?</p> <p>Below primary school - 1 小学以下 Primary school - 2 小学 Middle school - 3 初中 High school - 4 高中 Junior College - 5 大专 Undergraduate - 6 本科 Graduate - 7 硕士 Doctorial - 8 博士</p>
<b>Parental education level</b>	<p><b>What is your parent's current education level?</b> 您父母（其中一方）目前的学历或教育程度是?</p> <p>Below primary school - 1 小学以下 Primary school - 2 小学 Middle school - 3 初中 High school - 4 高中 Junior College - 5 大专 Undergraduate - 6 本科 Graduate - 7 硕士 Doctorial - 8 博士</p>
<b>Province</b>	<p><b>The place you live in belongs to?</b> 您所在的地区属于?</p> <p>Options include: 31 provinces (and municipalities) in Mainland China excluding Hong Kong, Macau and Taiwan 选项包括: 31 个中国大陆的省份和直辖市（除去香港、澳门</p>



	和台湾)
<b>Residential status</b>	<b>What is your residential status?</b> 您的户口为? Urban - 1 城镇户口 Rural - 0 农村户口
<b>Income level</b>	<b>What is your current annual income level? (Including salary and other income)</b> 您目前的个人年收入水平是? (包括工资以及其他收入) Below 20,000 - 1            2 万元以下 20,000 - 50,000 - 2        2-5 万 50,000 - 100,000 - 3       5-10 万 100,000 - 150,000 - 4      10-15 万 150,000 - 200,000 - 5      15-20 万 200,000 - 300,000 - 6      20-30 万 300,000 - 500,000 - 7      30-50 万 500,000 - 1,000,000 - 8    50-100 万 Above 1,000,000 - 9        100 万以上
<b>Family income level</b>	<b>What is your family's current annual income level? (Including salary and other income)</b> 您目前的家庭年收入水平是? (包括工资以及其他收入) Below 20,000 - 1            2 万元以下 20,000 - 50,000 - 2        2-5 万 50,000 - 100,000 - 3       5-10 万 100,000 - 150,000 - 4      10-15 万 150,000 - 200,000 - 5      15-20 万 200,000 - 300,000 - 6      20-30 万 300,000 - 500,000 - 7      30-50 万 500,000 - 1,000,000 - 8    50-100 万 Above 1,000,000 - 9        100 万以上
<b>Occupation</b>	<b>What is your current occupational status?</b> 您目前的工作状态是? Working in a firm, an institution, an organization, or a corporation - 就业于某公司、机构、组织、单位、或企业等 Working as a freelancer or self-employed - 自由职业或自营个体户 Unemployed - 无业或失业中 Retired - 退休人员 Still a student - 在校学生 A housewife/househusband - 家庭主妇/夫
<b>Political interest</b>	<b>To what extent are you interested in current affairs?</b> 多大程度上你对时事感兴趣? Very interested - 4 非常感兴趣 Somewhat interested - 3 比较感兴趣 Somewhat not interested - 2 比较不感兴趣

	Not interested at all - 1 完全不感兴趣
<b>Frequent use of Weibo/Wechat/Internet forum/Other social media</b>	<p><b>How often do you use the platforms listed below:</b> 下列平台你多久使用一次?</p> <p><b>Weibo 微博</b> <b>Wechat 微信</b> <b>Some Internet forums 某些网络论坛</b> <b>Other social media excluding Weibo and Wechat 微博微信外的其他社交媒体</b></p> <p>Almost every day - 5 几乎每天都会使用 Three to five times per week - 4 每周使用 3~5 次 One to two times per week - 3 每周使用 1~2 次 Once in several weeks - 2 每隔几周使用 1 次 Almost never - 1 几乎不使用</p>
<b>Social media usage</b>	<p><b>What do you often use the platforms listed below for?</b> 下列平台你最常用来做什么?</p> <p><b>Weibo 微博</b> <b>Wechat 微信</b> <b>Some Internet forums 某些网络论坛</b> <b>Other social media excluding Weibo and Wechat 微博微信外的其他社交媒体</b></p> <p>Read social or political news - 浏览社会时政新闻资讯 Read entertainment or gossip news - 浏览娱乐新闻八卦消息 Contacting or chatting with others - 日常联络聊天 Play games - 玩游戏 Handling personal business - 经营个人业务 Don't use it - 不使用这个平台</p>
<b>Most recent news consumption through Weibo/Wechat/Internet forum/Other social media</b>	<p><b>When was the last time you used the platforms listed below to view social or political information? (Choose the most applicable option)</b> 你上一次使用下列平台浏览有关社会与时政的新闻资讯是什么时候? (请选择一个最适合的选项)</p> <p><b>Weibo 微博</b> <b>Wechat 微信</b> <b>Some Internet forums 某些网络论坛</b> <b>Other social media excluding Weibo and Wechat 微博微信外的其他社交媒体</b></p> <p>Sometime today - 6 今天曾浏览过 Sometime this week - 5 本周内曾浏览过 Sometime this month - 4 本月内曾浏览过 Sometime this year - 3 今年内曾浏览过 Sometime last year or before last year - 2 去年或去年之前曾浏览过 Never - 1 从未浏览过</p>
<b>Marathon question</b>	<b>How many times have you won the championship of Shanghai</b>

	<p><b>International Marathon?</b>  你获得过几次上海国际马拉松全程赛的冠军?  Three times or more - 三次或以上  Two times - 两次  One time - 一次  None - 没有获得过</p>
--	---

**Pre-attitudinal Measurements**

<b>TCM pre-attitude</b>	<p><b>Whether health insurance should cover traditional Chinese medicine more or Western medicine more, there are two opinions. Which opinion do you agree with more? Please choose a score that represents your point of view the most on a scale from 0 to 10 (5 means neutral)</b>  对于医疗保险应该更多地覆盖西医治疗费用还是中医治疗的费用问题，一般有两种意见。你比较赞成哪一种？请从 0 到 10 选出最代表自己观点的评分（0 为最支持左侧说法，5 为中立，10 为最支持右侧说法）  Cover more Western medicine - 0 更多覆盖西医治疗费用  Cover more traditional Chinese medicine - 10 更多覆盖中医治疗费用</p>
<b>Overseas policy pre-attitude</b>	<p><b>Whether the state should help overseas Chinese citizens come back to China during the pandemic, there are two opinions. Which opinion do you agree with more? Please choose a score that represents your point of view the most on a scale from 0 to 10 (5 means neutral)</b>  对于在疫情期间身处海外的华人想要回国的问题，一般有两种意见。你比较赞成哪一种？请从 0 到 10 选出最代表自己观点的评分（0 为最支持左侧说法，5 为中立，10 为最支持右侧说法）  Try the best to help them come back - 0 尽量帮助他们回国  Try the best to prevent them from coming back - 10 尽量限制他们回国</p>
<b>University graduation pre-attitude</b>	<p><b>About what factor determines whether university students can graduate successfully, there are two opinions. Which opinion do you agree with more? Please choose a score that represents your point of view the most on a scale from 0 to 10 (5 means neutral)</b>  对于大学生是否能顺利毕业取决于何种因素，一般有两种意见。你比较赞成哪一种？请从 0 到 10 选出最代表自己观点的评分（0 为最支持左侧说法，5 为中立，10 为最支持右侧说法）  External factors like the difficulty of courses and the teaching quality of teachers - 0 专业课程的难度、教师教学水平质量等</p>

	外在因素 Internal factors like university students' personal efforts - 10 大学生的个人努力等内在因素
--	--

### Post-attitudinal Measurements

<b>TCM post-attitude</b>	<p><b>After reading the post and relevant comments, to what extent do you agree with or disagree with more financial investments in traditional Chinese medicine? Please choose a score that represents your point of view the most on a scale from 0 to 10 (5 means neutral)</b></p> <p>看完该微博及相关网友评论后,你多大程度上支持或者反对加大对中医的财政投入?请从0到10选出最代表自己观点的评分(0为最支持左侧说法,5为中立,10为最支持右侧说法)</p> <p>Strongly disagree with more financial investments in traditional Chinese medicine - 0 十分反对加大中医财政投入</p> <p>Strongly agree with more financial investments in traditional Chinese medicine - 10 十分支持加大中医财政投入</p>
<b>Overseas policy post-attitude</b>	<p><b>After reading the post and relevant comments, to what extent do you agree or disagree that overseas Chinese citizens need to have a double-negative report before they can board the plane and return to China? Please choose a score that represents your point of view the most on a scale from 0 to 10 (5 means neutral)</b></p> <p>看完该微博及相关网友评论后,你多大程度上支持或者反对海外华人需凭双阴性证明才可以登机回国?请从0到10选出最代表自己观点的评分(0为最支持左侧说法,5为中立,10为最支持右侧说法)</p> <p>Strongly disagree with the double-negative report - 0 十分反对双阴性证明</p> <p>Strongly agree with the double-negative report - 10 十分支持双阴性证明</p>
<b>University graduation post-attitude</b>	<p><b>After reading the post and relevant comments, to what extent do you agree or disagree with the cancelation of the clearing exam? Please choose a score that represents your point of view the most on a scale from 0 to 10 (5 means neutral)</b></p> <p>看完该微博及相关网友评论后,你多大程度上支持或者反对大学取消清考?请从0到10选出最代表自己观点的评分(0为最支持左侧说法,5为中立,10为最支持右侧说法)</p> <p>Strongly disagree with the cancelation of the clearing exam - 0 十分反对取消清考</p> <p>Strongly agree with the cancelation of the clearing exam - 10 十分支持取消清考</p>

## Appendix 5: Two Instrumental Manipulation Check Questions

### First instrumental manipulation check question

*We would like to know what kinds of websites and social media platforms do you usually use.*

*With the development of Internet technology, more and more netizens use all kinds of websites and social media platforms to read news, to play games, and to do shopping. Before continuing to fill out the questionnaire, we would like to know if you have carefully read this question. Please ignore the following question and check Douban, Taobao, and Sohu directly, and proceed to the next page.*

*Which websites or social media platforms do you often use? Please check:*

我们想了解您一般都使用哪些网站和社交媒体。

随着互联网技术的发展，越来越多的网民使用各类网站和社交媒体平台浏览新闻，休闲娱乐，在线购物。在继续填写问卷之前，为了解到目前为止您是否依然仔细阅读了本题，请您忽略以下问题并直接勾选豆瓣，淘宝和搜狐，然后进入下一页。

您经常使用下列哪些网站或社交媒体？请勾选：

Douban 豆瓣	Taobao 淘宝	Sohu 搜狐
Sina 新浪	Youku 优酷	Bilibili 哔哩哔哩
Zhihu 知乎	T-mall 天猫	TikTok 抖音
Wechat 微信	Baidu 百度	Kuaishou 快手
Tencent 腾讯	iQiyi 爱奇艺	NetEase 网易

### Second instrumental manipulation check question

*We would like to know what's your favorite color.*

*Many studies have shown that people's favorite color is associated with their personality. For example, passionate people like red, calm people like blue, low-key people like gray etc. Before continuing to fill out the questionnaire, we would like to know if you have carefully read this question. Please ignore the following question and check red and blue, and proceed to the next page.*

*What is your favorite color? Please check:*

我们想了解您最喜欢什么颜色。

许多研究表明，人们所喜爱的颜色和自身的性格相关。比如，热情的人喜欢红色，沉稳的人喜欢蓝色，低调的人喜欢灰色等等。在继续填写问卷之前，为了解到目前为止您是

否依然仔细阅读了本题，请您忽略以下问题并直接勾选红色和蓝色，然后进入下一页。

您最喜欢的颜色是？请勾选：

White 白色	Gray 灰色	Red 红色
Pink 粉色	Green 绿色	Blue 蓝色