

RESEARCH REPORT

Political Fact-checking and Its Effects on Public Attitudes: Experimental Evidence from China

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Abstract

This study investigates the effect of political misinformation as propaganda on the legitimacy of the Chinese government. A survey experiment ($n = 2,236$) was conducted to analyse the effect of positively spun misinformation on citizens' perceptions and support for the government on two pivotal issues: the economy and air pollution. Results show that spreading positively spun misinformation is beneficial to the regime, as it leads to positive perceptions of the issue and increased support for the government. Interestingly, even when misinformation is exposed through credibly sourced corrections, trust and support for the government remain as high or higher than for the control groups. These effects are significant and hold constant in two issue types, underscoring the strategic value of disseminating positively spun yet false information in China. These findings have rich implications for studies of misinformation and fact-checking in general and China's information politics in particular.

摘要

有关政府工作绩效的正面宣传能否提升政治支持与政治信任？而接收与官方相悖的信息又会如何更新民众对政府绩效的评价及政治支持？本研究集中关注经济发展与空气治理两大议题，通过设计与发放问卷实验（ $n = 2,236$ ），发现中国政府运用积极信息报道手段能显著促进民众对议题的积极认知并提升政府支持度。此外，即使通过较为权威的信息来源纠正官方数据，民众对政府的信任及支持度仍然显著高于控制组。以上效应在两大议题中呈现出一致性，突显中国在政府工作绩效正面宣传上的战略性价值，对当下信息政治研究有一定启示意义。

Keywords: information politics; fact-checking; economy; air pollution; China

关键词: 信息政治; 事实核查; 经济; 空气污染; 中国

“Do facts matter?” Jennifer Hochschild and Katherine Einstein ask in the title of their monograph, addressing the role of misinformation in US politics.¹ The recurrence of information politics, particularly the prevalence of misinformation, has spurred intense academic attention, primarily on how it has disrupted democratic processes worldwide.² Misinformation refers to maliciously disseminated false or inaccurate information that is aimed at causing various intentional disruptions.³ A key research agenda within this field pertains to the weaponization of misinformation as propaganda by political elites to shape public opinion, how citizens in turn mediate these efforts and the political consequences of such exposure.⁴ In this context, propaganda encompasses a specific class of communication characterized by attempts to manipulate cognitions and guide behaviour, with

1 Hochschild and Einstein 2015.

2 Allcott and Gentzkow 2017; Jerit and Zhao 2020.

3 Guess and Lyons 2020, 10–11.

4 Tucker et al. 2018.

the intention of eliciting responses aligned with the propagandist's goals. To accomplish this, propagandists seek to regulate the flow of information, often by "presenting distorted information from what appears to be a credible source."⁵

While there is an increasingly broad literature examining the use of political misinformation to influence the public in episodic events within democratic contexts,⁶ there has been comparatively less empirical work addressing the challenge of how these effects apply to authoritarian settings, where the use of political misinformation as propaganda to shape public opinion is increasingly evident.⁷ A series of ground-breaking works has endeavoured to bridge this gap by delving into the adverse political ramifications of false news in China.⁸ Examples include studies examining how the use of "false denials" to deny factual incidents can backfire on the state.⁹ More recently, leading scholars in authoritarian politics have explored how individuals respond differently to misinformation according to their pre-existing knowledge and capacity to fact check for themselves.¹⁰ While these studies provide a valuable first step, our understanding of the dynamics of political misinformation in China and its potential to manipulate mass political opinion and support in the digital era remains limited.

Recognizing the multifaceted interpretations of propaganda, we focus on a specific type known as "positive propaganda," which is characterized by the embellishment of certain favourable aspects of issues that flatter the regime.¹¹ In China, the practice of employing misinformation for such propagandistic purposes has a long historical precedent. Previous research has documented instances where local officials exaggerated agricultural yields during the Great Leap Forward and how the *People's Daily* coined terms such as "launching high-yield agricultural satellites" (*fang gao-chan weixing* 放高产卫星) to promote often spurious claims of record-breaking grain yields to justify government initiatives.¹² In the digital landscape, the Chinese government has pioneered digital tools for both propaganda and censorship purposes in an effort to banish undesirable influences in the country's "information space."¹³ In effect, citizens typically only have access to information provided by the state or Party-controlled media. Thus, the case of China provides a compelling exploration of the use and effects of misinformation as positive propaganda in the context of complete information hegemony by the state.

In this context, this research report sets out to contribute to the literature on the effects of political misinformation by examining how state-sanctioned misinformation influences the perception of citizens towards the central government in China. It aims to answer two research questions. First, how does state-sanctioned favourable misinformation shape individuals' views on a given matter and their trust and support for the Chinese government? Next, does rectifying such misinformation prompt individuals to subsequently recalibrate their viewpoints and endorsements?

Our findings have relevance for important theoretical debates. They speak to emergent research on information politics, especially on the modern dynamics of how states employ misinformation as propaganda,¹⁴ the issue of whether and how propaganda can be effective,¹⁵ and the potential political costs of employing such deception.¹⁶

5 Jowett and O'Donnell 2018, 51.

6 Hahl, Kim and Sivan 2018.

7 King, Pan and Roberts 2017.

8 Huang 2015; 2017.

9 Wang and Huang 2020.

10 Gläsel and Paula 2020; Peisakhin and Rozenas 2018.

11 Huang 2015, 421; Brady 2009, 444–45.

12 Chen, Shuo, et al. 2022, 1.

13 Roberts 2018.

14 Adena et al. 2015.

15 Huang 2015.

16 Swire et al. 2017.

Misinformation Effects: Theoretical Expectations

Our first aim is to assess the impact of favourable political misinformation on citizens' opinions regarding a pertinent issue. When individuals first encounter government-provided information, they may not possess sufficient knowledge to validate its accuracy. In such situations, the relatively credible information source (the government) and the limited access to alternative information can induce individuals to accept the information as truthful. Such a positive strand of news – distinct from mere “soft propaganda” yet bearing certain shared attributes like credible assertions and positively appealing political messages – is notably effective in evoking emotional responses and exerting direct impacts on the configuration of political attitudes in the context of China.¹⁷ Thus, for our first hypothesis:

Misinformation that portrays the government in a positive light would result in an increase in citizens' trust and support of the government (H1).

Next, we examine the impact of correcting misinformation – exposure of the government's deceit – on citizens' attitudes towards the issue and the state. Research in persuasion has established that source credibility is closely linked to attitude formation and change,¹⁸ and the communicator's credibility significantly influences the belief of a correction.¹⁹ Therefore, expertise – denoting the degree to which a speaker is perceived to be capable of making correct assertions – emerges as one of the most important dimensions for gauging the credibility of communicators.²⁰ So long as citizens are presented with a correction provided by perceived expertise and robust fact-checking, the treatment will likely spur them to update their opinions to an extent.

However, empirical studies have also shown that citizens – at least in democratic contexts – do not base their support of political actors solely on the virtue of their truthfulness.²¹ In China, where (explicit) trust in the government is remarkably high and people predominantly rely on official government sources for information, respondents may opt to trust the government more than they do the corrections that contest official state information.²² Aligned with this literature, we expect that while respondents may update their opinion on the actual matter, their support and feelings towards the central government would, however, be less affected. Synthesizing these factors, our second hypothesis offers that:

Upon encountering misinformation and subsequently receiving fact-checks, there is a projected marginal decline in trust and support for the Chinese government in the correction group, contrasting with the misinformation group (H2).

Lastly, our study compares citizens' trust and support for the government, juxtaposing the control scenario (respondents unexposed to either misinformation or correction) with the fact-checking scenario. Empirical accounts show that even though some political costs are incurred when misinformation is exposed, the net outcome of citizens' support for and trust in the state remains high or even higher compared to the control situation where there is no misinformation.²³ One reason can arguably be the “continued influence effect” of misinformation, where misinformation continues to influence memory and reasoning even after credible corrections are offered.²⁴ Once misinformation

17 Perry 2017; Mattingly and Yao 2022.

18 Pornpitakpan 2004.

19 DiFonzo and Bordia 2007.

20 Hovland, Janis and Kelley 1953.

21 Nyhan et al. 2019; Swire et al. 2017.

22 Huang, Intawan and Nicholson 2022.

23 Swire et al. 2017.

24 Lewandowsky et al. 2012.

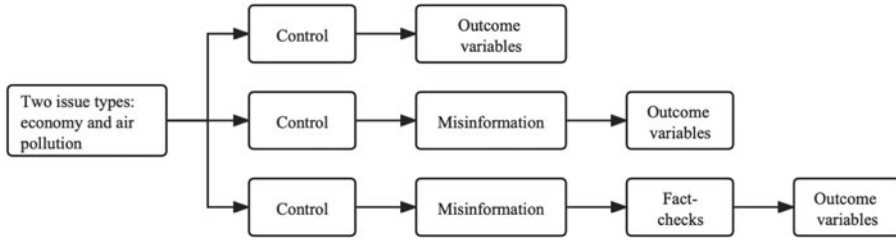


Figure 1. Factorial Design of the Experiment

is internalized as true, this conviction is subsequently difficult to change. In other words, despite the potential for corrections to rectify misconceptions, a dynamic of “blind faith in the government” may come into play. This is amplified by the strict information control regime in China, where the majority of citizens do not have access to alternative or contrarian perspectives. Thus, our final hypothesis states:

Despite encountering misinformation and subsequently receiving fact-checks, there remains a significantly higher level of state trust and support in the correction group than among respondents who are not exposed to either misinformation or correction (H3).

Survey Design

We designed survey experiments to investigate the impact of misinformation and correction on public opinion in contemporary China. We drew upon real events and statements from the central government, as doing so is both ethically important and relevant to our study design.

Our primary variables of interest are participants’ opinions of the issue itself, their perception of the general veracity of the central government, and their support of the central government. We employed a 3×3 between-subjects survey design. As shown in [Figure 1](#), participants were initially randomly divided into two issue categories: the economy and air pollution. Within each issue category, one-third of the participants were randomly assigned to a control group, receiving a short session of neutral and generic information about the issue. Another third viewed this same section in addition to positively spun misinformation attributed to the central government. The remaining third received all the previous messages, along with fact-checking statements that corrected the misinformation. Participants were not allowed to participate across groups.

In our survey flow, the first step involved an ethics consent form informing participants that in this completely anonymous survey, they would read a report about China and be asked about their opinions.²⁵ Upon providing their consent, all participants were randomized into two scenarios. Thereafter, the experimental treatment was applied in which participants were randomly allotted to one of the three experimental groups, each receiving a different level of information regarding the scenarios. To avoid cognitive overload or sequencing potentially affecting participants, we presented each piece of information and subsequent correction on separate pages.

Upon completion of the scenarios, participants proceeded to evaluate three outcome variables: their perception of the actual issue (for example, whether the economy is doing well), support for the government, and their perception of the government’s truthfulness (for example, to what extent are government statements about the economy true). There were only two outcome variables

25 To ensure the ethical integrity of our study, we sought approval from the Institutional Review Boards before commencing any data collection or analysis. This step was taken to ensure that our research adheres to ethical standards and guidelines involving human participants.

for the control groups as they were not exposed to misinformation. All outcomes used a rating scale ranging from 0 to 100, where 0 represents complete negativity or lack of government support.

Afterwards, participants answered demographic variables, including age, gender, race/ethnicity, marital status, education and income. Two attention-check questions were included to identify respondents who did not complete the survey carefully. We also conducted a comprehension check to measure the effectiveness of our treatments. At the end of the experiment, a debriefing statement clarified the purpose and procedure of the study. The anonymity of the survey was emphasized again. Participants were notified that they had the option to withdraw their data if they did not want their responses to be included.

Participants

Participants were recruited in June 2021 through a Chinese research consultancy service that specializes in disseminating questionnaires through its own platform, which is similar to Amazon's Mechanical Turk but with a narrower focus on survey research. Through this platform, respondents were able to complete the surveys on their own electronic devices from their own locations, enabling us to reach a larger participant pool, a condition that would have been cost-prohibitive with traditional sampling methods. To ensure response validity, we restricted the sample to Chinese citizens residing in China who passed our pre-screening criteria of nationality and who correctly answered control test questions and comprehension checks. A perpetual challenge for surveys is to ensure the validity of responses gathered, as there is always a risk that participants might not properly complete the survey. To control for this, we added two simple attention-check questions in the demographic section probing respondents about the name of the premier of China and the founding year of the PRC.²⁶ We also added comprehension checks that ensured respondents received the information and that their decisions were impacted by the treatments. Any respondents who completed the survey more than 50 per cent faster than the average time taken²⁷ and those who were under 18 were excluded from the analysis;²⁸ we also rejected survey results linked to identical IP addresses.

In total, we removed 281 invalid responses in the pre-processing process. The final sample, across all three experimental waves, consisted of 2,186 participants, with 1,077 in the first case and 1,109 in the second case. Out of the total participants, 44.51 per cent were female, 55.26 per cent were male, and 0.23 per cent were categorized as others. The age of participants was split between four categories, in increasing order: 18–29 (22.78 per cent), 30–45 (53.20 per cent), 46–60 (20.45 per cent) and above 60 (3.57 per cent). Among all participants, 41.86 per cent (915) had completed college education or higher, while the remaining 14.73 per cent (322) were educated up to middle school and 43.41 per cent (949) were educated at the high school level. Full descriptive characteristics of demographic variables are presented in the online Supplementary Table 1.

The respondents' social demographic indicators closely align with those of online samples drawn in similar studies conducted in China.²⁹ Participants tend to be younger, better educated and more likely to reside in urban areas. As for the external validity of online surveys, a recent national census

26 In the year when the survey was distributed, Premier Li Keqiang had been in his position for over 9 years. Similarly, the founding year of China is typically taught in kindergarten and the first grade of primary school, making the answers to these questions common knowledge among the general Chinese population. These questions were used as attention-check measures and were not intended to introduce bias towards educated respondents.

27 During our pilot test, participants took an average of approximately 127 seconds to complete the survey. Notably, the control group had a shorter average completion time of about 83 seconds compared to the other groups, as they were not exposed to any misinformation or fact-checks. Consequently, the threshold for being 50% faster, set at 63 seconds, was lenient in light of the control group's quicker completion time.

28 We obtained IRB approval to exclude participants under 18 years of age and included a notice at the beginning of our survey that stated that participants must be at least 18 years old. Despite these measures, our results analysis revealed that 1.86% of the total sample reported being under 18 years old. We opted to remove these respondents from our analysis.

29 Weiss 2019.

shows that China hosts the world's largest digital community, with approximately 1.07 billion netizens as of 2022.³⁰ Meanwhile, a recent study on the emerging trend of internet recruitment in China shows that online convenience samples produce attitudes that are highly consistent with those from national probability samples.³¹ Thus, these netizens are regarded as a politically important subset of the population.

Stimuli

Statements related to the economy and air pollution that were attributed to the central government in the past five years – and which have been contested by reputable sources – were independently collected. Before selecting the treatment cases, we conducted a pre-test to evaluate ten topics related to government performance, including seven domestic and three international issues. We did so by organizing a focus group and generating discussions among a group of doctoral candidates majoring in political science, history and sociology. We distributed the *priori* survey, collected their responses and measured the effects of the treatments. After the session, we continued a structural discussion on the popularity and pellucidity of the issues. Based on these results, the final two selected topics were economic development and air pollution.³²

In the economic scenario, we presented positive information concerning China's official GDP growth rate. The treatment conveyed that the National Bureau of Statistics (NBS) had announced a 2016 GDP growth rate of 6.7 per cent, emphasizing that "this growth rate falls within the reasonable range of China's policy expectations (between 6.5 per cent and 7 per cent), showing that the Chinese economy still possesses strong growth momentum."³³ In the air pollution scenario, we provided positive information about the annual PM2.5 concentrations in Beijing. According to the Department of Environmental Protection (DEP), Beijing's air quality demonstrated continued improvement, with an average PM2.5 concentration of 85.9 µg/m³ in 2014, which was a 4 per cent decrease from the previous year.³⁴

The corrections for misinformation in the two scenarios were sourced from reputable domestic and international institutions, and careful consideration was given to selecting sources with perceived expertise and robust methods and data. For the economic scenario, we used a robust estimation provided by economists from the University of Chicago and the Chinese University of Hong Kong and published by the Brookings Institution. Another source of information was the China Central Inspection Team and local officials, which publicly denounced the falsification of GDP data in the north-eastern region.³⁵ In the environment scenario, we presented two reports from a research team at the Guanghua School of Management at Peking University.³⁶ This research

30 "Wo guo wangmin guimo da 10.51 yi" (Internet users reach 1.051 billion). *Xinhua*, 31 August 2022, https://www.gov.cn/xinwen/2022-08/31/content_5707605.htm. Accessed on 17 March 2023.

31 Li, Shi and Zhu 2018.

32 Initially, we intended to incorporate an international issue – China's international image – as our third case. However, owing to constraints related to data availability and treatment limitations, we made the decision to exclude it from the scope of this study.

33 "Tongji ju: 2016 nian jingji yunxing chu zai heli qujian zengzhang zhiliang he xiaoyi tigao" (China's economic growth remains in a reasonable range in 2016). *www.gov.cn*, 20 January 2017, https://www.gov.cn/xinwen/2017-01/20/content_5161508.htm. Accessed on 3 March 2022.

34 "Beijing shi huanbao ju: qunian PM 2.5 zhong wuran tian jianshao 13 tian" (Heavy pollution days decreased by 13 days in 2014). Beijing Municipal Ecology and Environment Bureau, 5 January 2015, <https://sthjj.beijing.gov.cn/bjhrb/index/xxgk69/sthjlyzgw/wrygl/802648/>. Accessed on 17 January 2023.

35 China's national accounts primarily rely on data from local officials. However, given the potential motivation for local governments to manipulate local growth and investment statistics, the National Bureau of Statistics attempts to mitigate this bias by adjusting local data through its own surveys and administrative information. Therefore, the accuracy of the overall GDP figures depends on the extent of misreporting by local officials. In this context, the falsification of local GDP data casts doubts on the authenticity of national GDP figures. See Chen, Wei, et al. 2019.

36 A prestigious academic institution in China.

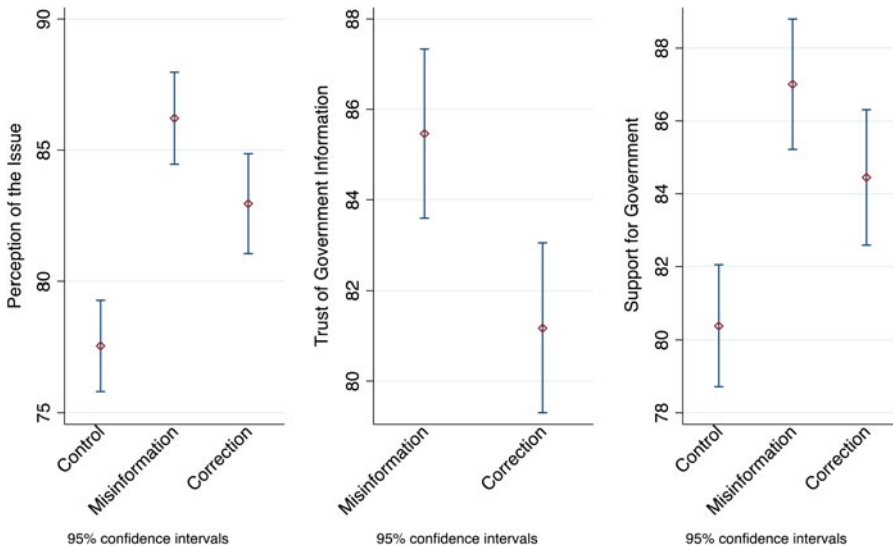


Figure 2. Group Means of Experiments (Economy Scenario).

team conducted a longitudinal study on air pollution, collecting PM2.5 data from both the US Embassy and environmental monitoring stations run by the DEP in Beijing. They provided a thorough comparison of hourly observations for the year 2014.³⁷ These reports showed that the average PM2.5 concentration in 2014 was 98.57 $\mu\text{g}/\text{m}^3$, indicating a 15 per cent increase over the official data.³⁸

Results

Figure 2 presents the means comparisons of our variables of interest across the three experimental conditions for the economy scenario. As anticipated, the treatment effects of the GDP issue (left panel) reveal that, compared to the control condition, positively spun misinformation from the Chinese government led to a significant increase of 8.7 points on a 100-point scale in respondents' perception of the state of economic development ($p < 0.001$).³⁹ Conversely, the correction reduced the perception of the economic development issue relative to the misinformation condition by 3.3 points ($p = 0.015$). However, even after the correction, the perception remained higher than in the control group, with an effect of 5.4 points ($p < 0.001$). This suggests that after individuals receive positive misinformation and enhance their perception of the economic situation, a reputable challenge can only partially mitigate the impact of misinformation. This finding aligns with existing research on the continued influence of misinformation, wherein positively spun misinformation continues to influence memory and reasoning even after credible corrections.⁴⁰

The middle panel in Figure 2 presents a comparison of the perceptions of information truthfulness between the misinformation and correction groups. Respondents were asked to what extent they believed the economic data officially released by the national government truthfully reflect

37 "Kongqi zhihang pinggu baogao" (Air quality assessment report). Guanghai School of Management, March 2015, https://songxichen.com/Uploads/Files/Report/Air%20Quality%20Assessment%20Report_I_201503.pdf. Accessed on 3 December 2022.

38 Online supplementary materials present the survey and stimuli in detail.

39 All the effects below were calculated by Scheffé tests. Details can be seen in the online Supplementary Tables 6–11.

40 Lewandowsky et al. 2012.

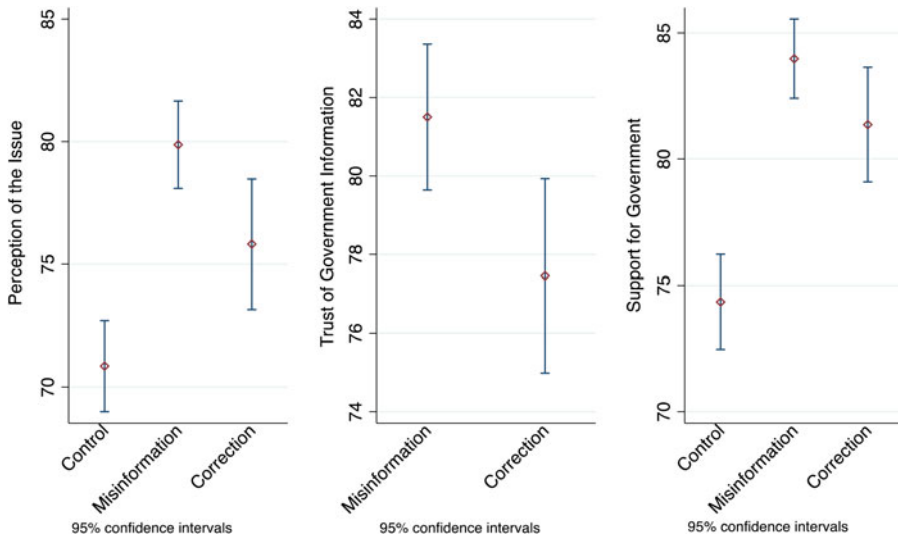


Figure 3. Group Means of Experiments (Air Pollution Scenario).

the actual situation.⁴¹ As predicted, the correction significantly decreased respondents' perception of the government's information truthfulness, resulting in an effect size of 4.3 points ($p = 0.002$). This demonstrates that our sources have effectively reduced people's trust in the economic development information disseminated by the central government, highlighting the effectiveness of our corrections. The right panel in Figure 2 depicts changes in support for the government across the three experimental waves. The introduction of misinformation regarding the GDP growth rate led to a noteworthy increase in support for the Chinese government by 6.6 points ($p < 0.001$). In contrast, the correction led to a decrease in support for the government compared to the misinformation condition. However, this decrease of 2.6 points did not reach statistical significance ($p = 0.055$). Nevertheless, the level of support still remained about 4.1 points higher ($p = 0.002$) than that observed in the control group.

Interestingly, despite the different subject matter, the scenario concerning air pollution in China exhibits a remarkably similar pattern to the economic scenario. As shown by the left panel in Figure 3, positively spun misinformation significantly increased respondents' perception of air quality conditions by 9.0 points ($p < 0.001$). On the other hand, the fact-checks resulted in a substantial reduction of 4.1 points ($p = 0.010$) in respondents' perception of the issue compared to the misinformation group. Notably, although our fact-checks moderated air pollution perception, this perception remained higher than that of the control group, which did not receive misinformation or correction. The difference was 5.0 points and was statistically significant ($p = 0.002$). This underscores that even after the deception is exposed, the overall "benefit" of propagating misinformation – the perception of the air pollution issue in China – still yields a substantial positive impact.

Similarly, as indicated by the middle panel of Figure 3, when respondents were asked about whether they believed that the figures officially released by the government truthfully reflected air quality in Beijing, our fact-checks notably decreased their perception of the government's information truthfulness, with an effect size of 4.0 points ($p = 0.009$). However, despite this reduction in perception of the issue and trust in the government's information, it did not lead to a statistically significant reduction in support for the government. As demonstrated in the right panel of Figure 3,

41 Here, it is noteworthy that the control group did not undergo any misinformation treatment related to GDP. As a result, no data were collected for this particular question from the control group.

the difference between the correction group and the misinformation group in terms of support for the government is 2.6 points ($p = 0.055$). In comparison, respondents who were exposed to misinformation experienced a substantial increase in their support for the government, with an impressive 9.6-point rise ($p < 0.001$). Consistent with our predictions, although the fact-checks did moderate some of this support, a significantly higher level of state support persisted compared to respondents who were not exposed to either misinformation or correction, with an effect size of 7.0 points ($p < 0.001$).

Given the relatively high proportion of Chinese Communist Party (CCP) members in our sample compared to the national average, we specifically focused on non-CCP members to assess the impact of positively spun misinformation on them. The results show that misinformation significantly improves the perception of issues, trust in and support for the government among non-CCP members. Interestingly, the sub-sample of non-CCP members, in the economy scenario, did not exhibit significant statistical differences between the control group and correction group in terms of support for the government (effect = 3.660, $p = 0.104$). This suggests that once the economic misinformation is corrected, non-CCP members tend to decrease their support to the control level. That is, our correction successfully moderated the magnitude of support derived from misinformation. However, for the air pollution scenario, even though the deceit is exposed, the level of support is still significantly higher than the control level (effect = 6.033, $p = 0.003$). This indicates the high sensitivity of the non-CCP members to economic information (refer to the online Supplementary Tables 2–3 and Supplementary Figures 1–2).

To verify the robustness of our results, we first employed bootstrapping on our dataset. Results from the use of wild cluster bootstrapped standard errors ($B = 3,000$) in six tests of means comparisons produced treatment effects similar to those obtained in our results, confirming the validity of our observed effects (see the online Supplementary Tables 4–5). We further applied multiple comparisons by using Bonferroni and Sidak tests. Our results remain consistent across all tests (see the online Supplementary Tables 6–11). Next, we ran balance tests between three groups, i.e. the control, misinformation, and correction groups, in terms of demographic characteristics and other control variables for each issue type. Most, but not all, covariates were well balanced in the two issues (see online Supplementary Tables 12–13). Therefore, we ran ordinary least square regressions on the respondents' perception of the issue, belief in correction and support for the government, together with all covariates. The results are consistent with the means comparisons after controlling for the covariates (see online Supplementary Tables 14–15). Given the significant implications of obtaining a nationally representative sample, we employed entropy balancing to re-weight our sample based on standard population parameters (age, gender and education level) derived from the 2022 national census. The outcomes of this re-weighting closely mirrored our main results in both scenarios (see online Supplementary Tables 16–17). This indicates that positively spun misinformation and related corrections may have a general effect over the national population.

Implication and Conclusion

The primary implications of this research report are as follows. First, the propagation of positive misinformation is politically beneficial to the Chinese government, as it leads to more favourable public perceptions of the issues and an overall increase in citizen support. This aligns with emergent research on misinformation in both democratic settings⁴² and in China more pertinently.⁴³ However, when the state's deceit is exposed by reputable information sources, citizens will punish the state by reducing their issue perception, trust in and support for the government. Despite this punitive reaction, the trust and support levels among those exposed to the deceit remain

42 van Duyn and Collier 2019; Flynn, Nyhan and Reifler 2017.

43 Huang 2017; Wang and Huang 2020.

significantly higher than those of the control group. These effects are significant and hold constant across the economic and environmental scenarios, going a long way in explaining the dynamics of misinformation as propaganda in China. Indeed, empirical accounts have long documented the continued dissemination of information that is clearly biased, misrepresented or outright false by various authoritarian state actors, begetting the puzzle of whether these actors are punished or incur political costs for employing deception.⁴⁴ In exploring this question through the lens of China, this study suggests a straightforward answer: such states do not face substantial political consequences. Rather, they can garner political support through the dissemination of misinformation and, even when exposed, the overall impact on citizens' trust and support for the state remains largely unchanged or even strengthened.

While this study does not provide a direct causal explanation for the observed effect, existing literature on authoritarianism and political psychology offers possible explanations. First, the quality of the source matters.⁴⁵ In China, where government trust is notably high and official sources are commonly relied upon for information, respondents may naturally lean towards trusting the government even when presented with corrections that contradict the official information. Although the disputing information originates from reputable sources, it may not serve as a complete and authoritative refutation of the government's information. While these challenges can erode trust in the government to some extent, the government's influence continues to persist.

Second, research on propaganda highlights that misinformation can be influenced by social and political pressures, spurring citizens to echo the "Party line" and act as if they support the government, even when they have access to unbiased information.⁴⁶ In our study, presenting state-sanctioned information on the state's positive performance may prompt respondents to indicate higher levels of support due to social cues or concerns about potential consequences.⁴⁷ The comparison between CCP and non-CCP members regarding government support (in the economic scenario) suggests the potential existence of preference falsification. Lastly, pertinent to the cognitive process, the corrections may have triggered a backfire response, where more hardcore supporters of the regime choose to reject facts that contradict their deeply held beliefs and opt to retain their support for the government despite the revelation of some deception.⁴⁸

Additionally, this study consistently reveals strong support for the government among respondents across various experimental scenarios. This observation prompts us to further explore three adjacent questions within the context of China. First, what factors influence citizens' support for the state where veracity and democratic accountability are not key considerations? Certainly, the literature on authoritarianism has determined that economic legitimacy is a crucial factor in such states, although research to unpack the dynamics of citizens' support for the Chinese state would prove illuminating.⁴⁹ The second question is whether exposure to misinformation has other more subtle effects on public opinion, such as potential differences in opinions towards the central government and those towards local authorities,⁵⁰ even if support for the government remains unchanged.

Lastly, exploring the heterogeneous effects related to susceptibility to misinformation and the influence of fact-checks is vital. Investigating who is most vulnerable to misinformation and how different segments of the population respond to corrective information would provide a more comprehensive understanding of the complexities underlying information processing and persuasion in China.

44 Ospina, Orosz and Spencer 2023.

45 Porter, Wood and Kirby 2018.

46 Huang 2017.

47 Carter and Carter 2023.

48 Aird et al. 2018; Swire et al. 2017.

49 Zhu 2011.

50 Chen, Jidong, Pan and Xu 2016.

In conclusion, this study provides insight into the political effects of misinformation as propaganda in China. It highlights that where the state has control over narratives and media, positively spun misinformation can be abused to influence public opinion and garner support to achieve other ends. In this establishment of information hegemony, “the truth is whatever the state says it is.”⁵¹ Ostensibly then, the study indicates that while fact-checks can temper public perceptions and government support, they may not entirely erase the effects of misinformation. Notably, these findings prompt consideration of the evolving dynamics within China’s domestic information landscape, where the portrayal of reality is consistently influenced.

Supplementary material. To view supplementary material for this article, please visit <https://doi.org/10.1017/S0305741024000365>

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Competing interests. None.

References

- Adena, Maja, Ruben Enikolopov, Maria Petrova, Veronica Santarosa and Ekaterina Zhuravskaya. 2015. “Radio and the rise of the Nazis in prewar Germany.” *The Quarterly Journal of Economics* 130(4), 1885–1939.
- Aird, Michael J., Ullrich K.H. Ecker, Briony Swire, Adam J. Berinsky and Stephan Lewandowsky. 2018. “Does truth matter to voters? The effects of correcting political misinformation in an Australian sample.” *Royal Society Open Science* 5(12), 180593.
- Allcott, Hunt, and Matthew Gentzkow. 2017. “Social media and fake news in the 2016 election.” *Journal of Economic Perspectives* 31(2), 211–236.
- Brady, Anne-Marie. 2009. “Mass persuasion as a means of legitimation and China’s popular authoritarianism.” *American Behavioral Scientist* 53(3), 434–457.
- Carter, Erin Baggott, and Brett L. Carter. 2023. *Propaganda in Autocracies: Institutions, Information, and the Politics of Belief*. New York: Cambridge University Press.
- Chen, Jidong, Jennifer Pan and Yiqing Xu. 2016. “Sources of authoritarian responsiveness: a field experiment in China.” *American Journal of Political Science* 60(2), 383–400.
- Chen, Shuo, Haoyuan Ding, Shu Lin and Haichun Ye. 2022. “From past lies to current misconduct: the long shadow of China’s Great Leap Forward.” *Journal of Development Economics* 157, 102888.
- Chen, Wei, Xilu Chen, Chang-Tai Hsieh and Zheng Song. 2019. “A forensic examination of China’s national accounts.” National Bureau of Economic Research Paper No. 25754. DOI 10.3386/w25754
- DiFonzo, Nicholas, and Prashant Bordia. 2007. “Rumor psychology: social and organizational approaches.” *American Psychological Association*. DOI:10.1037/11503-000.
- Flynn, Daniel J., Brendan Nyhan and Jason Reifler. 2017. “The nature and origins of misperceptions: understanding false and unsupported beliefs about politics.” *Political Psychology* 38, 127–150.
- Foucault, Michel. 1980. *Language, Counter-memory, Practice: Selected Essays and Interviews*. Cornell, NY: Cornell University Press.
- Gläsel, Christian, and Katrin Paula. 2020. “Sometimes less is more: censorship, news falsification, and disapproval in 1989 East Germany.” *American Journal of Political Science* 64(3), 682–698.
- Guess, Andrew M., and Benjamin A. Lyons. 2020. “Misinformation, misinformation, and online propaganda.” In Nathaniel Persily and Joshua A. Tucker (eds.), *Social Media and Democracy: The State of the Field, Prospects for Reform*. New York: Cambridge University Press, 10–33.
- Hahl, Oliver, Minjae Kim and Ezra W. Zuckerman Sivan. 2018. “The authentic appeal of the lying demagogue: proclaiming the deeper truth about political illegitimacy.” *American Sociological Review* 83(1), 1–33.
- Hochschild, Jennifer L., and Katherine Levine Einstein. 2015. “Do facts matter? Information and misinformation in American politics.” *Political Science Quarterly* 130, 585–624.
- Hovland, Carl Iver, Irving Lester Janis and Harold H. Kelley. 1953. *Communication and Persuasion*. New Haven, CT: Yale University Press.
- Huang, Haifeng. 2015. “Propaganda as signaling.” *Comparative Politics* 47(4), 419–444.

⁵¹ Foucault 1980.

- Huang, Haifeng.** 2017. "A war of (mis) information: the political effects of rumors and rumor rebuttals in an authoritarian country." *British Journal of Political Science* 47(2), 283–311.
- Huang, Haifeng, Chanita Intawan and Stephen P. Nicholson.** 2022. "In government we trust: implicit political trust and regime support in China." *Perspectives on Politics* 11(1), 1–19.
- Jerit, Jennifer, and Yangzi Zhao.** 2020. "Political misinformation." *Annual Review of Political Science* 23, 77–94.
- Jowett, Garth S., and Victoria O'Donnell.** 2018. *Propaganda and Persuasion*. Thousand Oaks, CA: Sage Publications.
- King, Gary, Jennifer Pan and Margaret E. Roberts.** 2017. "How the Chinese government fabricates social media posts for strategic distraction, not engaged argument." *American Political Science Review* 111(3), 484–501.
- Lewandowsky, Stephan, Ullrich K.H. Ecker, Colleen M. Seifert, Norbert Schwarz and John Cook.** 2012. "Misinformation and its correction: continued influence and successful debiasing." *Psychological Science in the Public Interest* 13(3), 106–131.
- Li, Xiaojun, Weiyi Shi and Boliang Zhu.** 2018. "The face of internet recruitment: evaluating the labor markets of online crowdsourcing platforms in China." *Research and Politics* 5(1), 1–8.
- Mattingley, Daniel C., and Elaine Yao.** 2022. "How soft propaganda persuades." *Comparative Political Studies* 55(9), 1569–94.
- Nyhan, Brendan, Ethan Porter, Jason Reifler and Thomas J. Wood.** 2019. "Taking fact-checks literally but not seriously? The effects of journalistic fact-checking on factual beliefs and candidate favorability." *Political Behavior* 42, 1–22.
- Ospina, Juan, Gábor Orosz and Steven Spencer.** 2023. "The relation between authoritarian leadership and belief in fake news." *Scientific Reports* 13(1), 12860.
- Peisakhin, Leonid, and Arturas Rozenas.** 2018. "Electoral effects of biased media: Russian television in Ukraine." *American Journal of Political Science* 62(3), 535–550.
- Perry, Elizabeth J.** 2017. "Cultural governance in contemporary China: 're-orienting' Party propaganda." In Vivienne Shue and Patricia M. Thornton (eds.), *To Govern China: Evolving Practices of Power*. Cambridge: Cambridge University Press, 29–55.
- Pornpitakpan, Chanthika.** 2004. "The persuasiveness of source credibility: a critical review of five decades' evidence." *Journal of Applied Social Psychology* 34(2), 243–281.
- Porter, Ethan, Thomas J. Wood and David Kirby.** 2018. "Sex trafficking, Russian infiltration, birth certificates, and pedophilia: a survey experiment correcting fake news." *Journal of Experimental Political Science* 5(2), 159–164.
- Roberts, Margaret.** 2018. *Censored: Distraction and Diversion Inside China's Great Firewall*. Princeton, NJ: Princeton University Press.
- Swire, Briony, Adam J. Berinsky, Stephan Lewandowsky and Ullrich K.H. Ecker.** 2017. "Processing political misinformation: comprehending the Trump phenomenon." *Royal Society Open Science* 4(3), 160802.
- Tucker, Joshua A., Andrew Guess, Pablo Barberá, Cristian Vaccari, Alexandra Siegel, Sergey Sanovich, Denis Stukal and Brendan Nyhan.** 2018. *Social Media, Political Polarization, and Political Disinformation: A Review of the Scientific Literature*. Menlo Park, CA: William and Flora Hewlett Foundation.
- van Duyn, Emily, and Jessica Collier.** 2019. "Priming and fake news: the effects of elite discourse on evaluations of news media." *Mass Communication and Society* 22(1), 29–48.
- Wang, Chengli, and Haifeng Huang.** 2020. "When 'fake news' becomes real: the consequences of false government denials in an authoritarian country." *Comparative Political Studies* 54, 753–778.
- Weiss, Jessica Chen.** 2019. "How hawkish is the Chinese public? Another look at 'rising nationalism' and Chinese foreign policy." *Journal of Contemporary China* 28(119), 679–695.
- Zhu, Yuchao.** 2011. "'Performance legitimacy' and China's political adaptation strategy." *Journal of Chinese Political Science* 16, 123–140.

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