

Local Government Weibo Use and Public Engagement in COVID-19: A Mediating Role of Government Trust, Credibility, and Transparency

Chengdan Luo, Nurul Ain Mohd Hasan, Abdul Mua'ti Zamri bin Ahmad

Department of Communication, Faculty of Modern Languages and Communication,
Universiti Putra Malaysia, Malaysia

Correspondence Email: namh@upm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i10/18962> DOI:10.6007/IJARBSS/v13-i10/18962

Published Date: 23 October, 2023

ABSTRACT : In recent years, local governments in China have started experimenting with social media platforms like Weibo and WeChat, among others, to communicate with the public during emergencies. Local governments' use of Weibo to disseminate information during emergencies has significantly impacted public engagement. This study proposes a model for analyzing public engagement in which local government Weibo and government trust, credibility, and transparency during the COVID-19 crisis serve as mediators. This study selected the Wuhan local government as the study control and surveyed 356 members of the Wuhan public via the Internet. The findings indicate that local government Weibo positively influences public perceptions of government trust, credibility, and transparency, thereby providing lessons for how local governments should respond to public crisis events in the era of social media.

Keywords: Government Weibo, Government Trust, Government Credibility, Government Transparency, Public Engagement

1. INTRODUCTION

In January 2020, COVID-19 quickly spread from Wuhan to 114 countries. This problematic situation in China resulted in pervasive hysteria and misunderstandings regarding the risk of novel coronavirus pneumonia, resulting in a more severe psychological and social crisis. Today, China has COVID-19 under control. Tian et al. (2020) intended for the government to inform the public that those who adhered to the quarantine policy could collaborate to overcome the situation.

Twitter is not available in China. This is why China has Weibo, a social media platform like Twitter with a significant user base in China. By the end of 2022, Weibo will have 586 million monthly active users and 252 million daily active users (Weibo, 2022). The central and local administrations utilize Weibo to disseminate information and news. Weibo lets the

government comment on public opinion and solve social problems in real-time (Bomsel, 2014; Gu, 2014). The General Office of the State Council's Chinese Government Network Operation Center maintains a central government Weibo account called "China Government Network." The Weibo of the Shanghai Government is "Shanghai Publish." Hubei Provincial Government Weibo's name translates to "Hubei Publish." There are more than 140,000 verified local and municipal Weibo accounts. More than three billion individuals are the government's followers on Weibo.

During these significant social emergencies and security incidents, government Weibo collaborates to construct an information dissemination matrix, proactively guide and regulate online information via the Weibo platform's diffusion effect and protect the right of netizens to know. It is essential for preventing and controlling epidemics and maintaining social stability. In Wuhan, the first city to experience the epidemic, many local government Weibo, including Hubei Publish, Wuhan Publish, and Health Wuhan, collaborated with the health committee to establish a content release mechanism, integrate the city's health system resources, and establish a 24-hour docking team for epidemic prevention and control. Through local government Weibo accounts, provide Wuhan residents with information on the epidemic and knowledge on its prevention and control. Track the responses of the public to published content. Increase the influence of public opinion. Maintaining social stability as quickly as possible will help prevent and control the disease's continued spread.

Numerous studies have found that when people have faith in their local government, they believe the information it releases is accurate. This increases people's awareness of their environment, which benefits the dissemination of local government information (Glik, 2007). Nonetheless, we observe how public engagement influences the government's credibility, trust, and transparency. As a result, we explain how local government Weibo controls public engagement under these three mediation effects. Local governments are regarded as the institutions with the closest connections to their constituents. Local administrations play an indispensable role in disseminating epidemic information for disease control. This study investigates how government credibility, trust, and transparency influenced public engagement during the Weibo epidemic. After the outbreak of the new coronavirus, local administrations in numerous countries and regions disseminated information about the attack through various media. In addition, local governments have released detailed information regarding confirmed cases, including specific addresses and activity paths. One of the more controversial issues is observing whether local governments' use of Weibo to communicate crises can alter public engagement and make the public feel more connected to local governments. Therefore, the findings of this study will aid in enhancing public crisis management.

The study had the following four objectives:

- This study examines the impact of local government Weibo use on public engagement.
- This study examines the influence of local government Weibo use mediated by government trust on public engagement.
- This study examines the influence of local government Weibo use mediated by government credibility on public engagement.
- This study examines the influence of local government Weibo use mediated by government transparency on public engagement.

2、 LITERATURE REVIEW AND HYPOTHESIS

2.1 The Concept of local government Weibo and its application

Government Weibo is an application that Chinese government departments and individual officials offer. Government Weibo is a frequently employed media tool, consisting of official Weibo created by government agencies and officials and personal Weibo created by the personnel of government officials, public affairs management agencies, and service organizations. In addition, the Weibo of party and government agencies includes party committees at all levels, the National People's Congress, the government, the Chinese People's Political Consultative Conference, the Commission for Discipline Inspection, the People's Court, the People's Procuratorate, and their working departments and agencies, along with other people's organizations and institutions governed by the Civil Service Law.

Weibo in China is comparable to Twitter in that it establishes close ties with the public and communicates with relevant stakeholders. Weibo has a broad reach and is a particular application platform that governments can command and exert substantial control over due to its simplicity of reception. The U.S. government posts information and news about its activities on Twitter, whereas legislators tend to market themselves directly and personally. Twitter also facilitates direct communication between lawmakers and the public (Jennifer et al., 2010). Twitter has facilitated government communication, role transformation, and management innovation as a social network that differs from traditional communication tools (Dianne, 2010). On the other hand, in China, Weibo has altered how the government interacts with the public, increasing public engagement and enhancing public awareness of democracy (Chen, 2012).

Liu et al. (2012) analyzed the definition, content design, features, operating system, and obstacles encountered by the Shanghai government's Weibo @Shanghai Publish and offered preliminary conclusions for Weibo management. In addition, Liu et al. (2016) investigated the information dissemination process of Shanghai government Weibo accounts using temporal signals. They resolved this issue by referring to the customer satisfaction model and integrating the essential elements of government Weibo. Zeng et al. (2020) disclosed how the Chinese Center for Disease Control and Prevention (CCDC) utilized social media to improve communication between the government and the public regarding public health, including recruitment, operations, and interactive measures. By analyzing the space, time, and content of Sina Weibo texts, Han et al. (2020) investigated the space, time, and content of Sina Weibo texts to investigate public perceptions of the initial phases of COVID-19 in China. Liao et al. (2020) analyzed data from Sina Weibo, China's most popular social media platform, to examine early public engagement with COVID-19 and government response.

It is crucial today to completely utilize government Weibo posts. Weibo has become an important channel for the dissemination of government information. Almost all government officials recognize the Internet's potency and know how to use it (Wang, 2014). Using new media platforms such as Weibo and WeChat, the government can more effectively disseminate information, demonstrate its position, and maintain emergency stability. In this circumstance, the report-by-report policy cannot accommodate emergency response requirements in unanticipated situations. Relevant personnel must issue unambiguous statements to control online speech.

2.2 The use of local government Weibo and the impact of public trust in government

Government trust evaluates whether government departments satisfy public expectations and responsibilities (Tolbert & Mossberger, 2006). Fostering long-term reciprocal relationships between governments and the public enables the public to trust aspects of

government (Grimmelikhuijsen et al., 2013; Wang & Wan Wart, 2007). Mishler & Rose (2001) found that public perceptions of economic and political expression influence trust in government.

Government trust is defined in this study as the public's perceptions and behavioral models of local governments based on their evaluation of government performance results and expectations of governments. After China's experience with the 2020 novel coronavirus pandemic, public trust in local governments has become essential. Research demonstrates that higher public trust in government results in greater government satisfaction, confidence in government, and increased government policy and regulation (Beerli et al., 2019; Cook & Gronke, 2005). Tolbert & Mossberger (2006), Jimenez & Iyer (2016), and Rudolph (2009) have found that distrust in government hurts its efficacy and efficiency, generates discontent with the government regarding engagement, and contributes to political instability.

Past research has shown a significant correlation between the government's use of Weibo and public confidence in the government (Sharoni, 2012). Nonetheless, there were contradictory results, with some studies finding a weaker correlation (McNeal et al., 2008). The public can participate in public administration and policy decisions via government-provided networks and new media. Local governments can also use new media platforms to increase direct public engagement and the transparency of political and administrative processes. Studies have also found that the government's use of social media is highly effective at fostering interaction, accountability, and public engagement (Hong, 2013; Porumbescu, 2015, 2016; Song & Lee, 2016). Based on prior research findings regarding government Weibo and public trust, we propose the following hypotheses:

H1: During the COVID-19 crisis, local government Weibo use has had a significant impact on government trust.

2.3 Local government Weibo use and its impact on government credibility

Government credibility is a significant concern for nations around the globe. Public recognition of a government's performance establishes its credibility. Therefore, governments can achieve high credibility if they provide information promptly, openly, and transparently and assume responsibility voluntarily (Alford, 2002). Some government platforms, for instance, promptly disseminate government information and respond to public requirements. Significantly during crisis transmission (Avery, 2017), so utilizing government platforms to disseminate information can aid in maintaining government credibility.

Berlillana (2018) examined the influence of government-public relations on the propensity to utilize government Weibo services. It proposed a COVID-19 transmission model based on the context of new media transmission because the inundation of disinformation hurts public information. (Song et al., 2020). This model employs Internet platforms to facilitate the propagation and distribution of media information. Zhu et al. (2021) presented recommendations and strategies for improving the user experience of mobile government service applications. Introduce the associated online pandemic scenario in the 2020 novel coronavirus pandemic context. According to research, the causes of the present situation are public hysteria during the epidemic, a lack of government credibility, and a decline in commercial profits. To increase government credibility and influence network security, scientific information dissemination, comprehensive network regulation, and expanding network capacity is necessary. Da Silva and Batista's (2007) research demonstrates that public-centered engagement and public governance must be combined to enhance the government's credibility. Additional empirical research is necessary to determine the effect

of government Weibo on public perceptions of government credibility, particularly during times of crisis. Considering these contexts, the following hypotheses are proposed:

H2: During the COVID-19 crisis, local government Weibo use has had a significant impact on government credibility.

2.4 Local Government Weibo uses and its Impact on government transparency

According to Roberts (2004), the essence of public engagement is shared ownership and authority. The issue of government transparency has also received consistent attention and significance. According to Halachmi and Greiling's (2013) study, transparency facilitates government affairs and vice versa. Improving government transparency, accessing public government information at any time, from any location, and promptly, and fostering improved interactions and connections with the government, thereby enhancing government accountability and relations, they stressed promoting harmony. The public has varying degrees of interest in and demand for government transparency, and governments can use social media to supplement information provision. Therefore, we discovered that government use of social media positively correlates with government transparency and trust (Song & Lee, 2015).

Moreover, research indicates that government transparency mediates the connection between government social media use and public trust (BTRNCEA & Nichita, 2015; Jimenez & Iyer, 2016). According to research, not only is there a correlation between government trust and public engagement, but government trust also functions as a mediator between social media use and public engagement (Im et al., 2012). On the other hand, government trust is always essential for the government because it seeks the best outcomes and wants the public to comply with and ultimately engage with relevant policies. By increasing levels of engagement and participation, governments can use social media to establish positive relations with the public and increase their credibility (Hong, 2013).

Numerous scholars have examined the public's perception of government information, its credibility, and its engagement with and response to it; thus, public-government relations must be studied (Carpenter, 2010; Grimmelikhuijsen & Knies, 2016; Im et al., 2014). According to Grimmelikhuijsen (2012), the availability of performance data affects public confidence. Research shows a correlation between public engagement and government performance regarding public trust and credibility (Dickson et al., 2009). Sternstin's (2010) study of general satisfaction with government social media and trust in the U.S. federal government found that if more government social media reflected transparency, individuals were likelier to invest time in and utilize these social media. It became evident that our confidence in government agencies had grown. Consequently, we must measure the changes in public-government contact during the crisis and the public's interactions with governments via social media.

Thus, the government's Weibo can influence public engagement, credibility, transparency, and trust. To further examine how public perceptions of the role and perceptions of government transparency in this mediating process changed during the COVID-19 crisis in China, the following hypothesis is proposed:

H3: During the COVID-19 crisis, local government Weibo use has had a significant impact on government transparency.

2.5 Use of local government Weibo and its impact on public engagement

Public engagement is a pattern of behavior in which the public engages in government activities and policies considering the government's performance, personal interests, social justice, and ethical constraints (Ayres & Braithwaite, 1992). The public is more attentive to their interests, influencing their compliance and engagement with government information. There is a close relationship between public identity and public rights, and the need for the public to uphold its moral responsibilities, trust, and obligations means that some public members may manifest self-interested tendencies in certain situations but not in others (Scholz, 1998). Past research has emphasized that public engagement aligns public behaviors, states, and lifestyles with the government's policy directions; therefore, a positive public response promotes the effective implementation of government engagement (Bartfield & Mayer, 1994; Gofen, 2015). In this study, public engagement infiltrates and integrates into government activities and procedures through a deliberate process dependent on government performance, personal interests, social justice, and moral constraints.

Ma et al. (2016) Weibo has provided a new social media channel for many Chinese to obtain timely and pertinent news content from the government and share their perspectives on public affairs. The impact of management performance on the Chinese public's perception of government performance was analyzed using survey data. They emphasized that emerging media, particularly new media for local governments to disseminate information, has been designated an essential strategy for promoting public engagement and entitlement. (Ma et al., 2017) We also analyzed the relationship between the effectiveness of government Weibo use and public awareness. Weymouth et al. (2019) discovered a significant gap between public expectations of government and the trust and dependability of government engagement. Researchers anticipate that after establishing this distinction, governments will increase public engagement via social media (Siyam et al., 2020).

Previous studies have shown that government efforts are futile without public engagement in formulating and implementing government policies and can have significant risk implications (Dickson et al., 2009; Gofen, 2015). A study like Murphy's (2016) discovered that program justice affects tax compliance and participation in other government-related matters. Gofen (2015) also intends to determine that people tend to have a greater understanding of governments when obtaining information via social media platforms such as Twitter, which aids in preventing violations. The use of Weibo by the government also facilitates the provision of services to the public, thereby increasing and fostering public interest and positively influencing public engagement (Jimenez & Iyer, 2016). In addition, the public was delighted when the government made decisions via Weibo. Consequently, the public felt included rather than isolated in the government's governance system, contributing to public engagement. Based on prior research on government Weibo and public engagement during the COVID-19 crisis, we propose the following hypothesis:

H4: During the COVID-19 crisis, local government Weibo use has had a significant impact on public engagement.

Figure 1 depicts the theoretical framework of this investigation based on the hypotheses above.

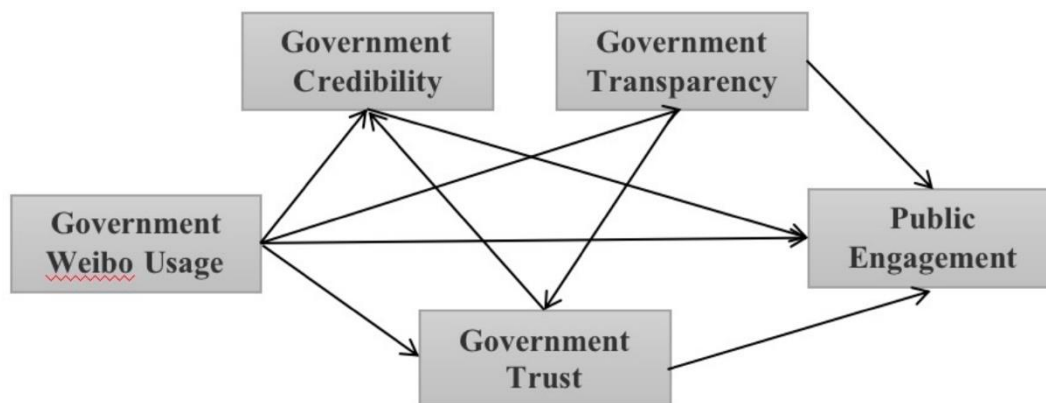


Figure 1 : Theoretical framework

3、 METHODOLOGY

3.1 Research Design

The quantitative survey methodology was used to acquire data for this study. In this quantitative investigation, we employed a correlational cross-sectional survey design. We determined the quantitative research approach to evaluate the research queries and objectives. The public using Weibo platforms in Wuhan was administered a survey questionnaire to assess the impact of the local government's use of Weibo on public engagement and the relationship between trust, credibility, and government transparency among a specific population. In this study, the survey design was deemed an appropriate method because it enables researchers to comprehend the opinions of visitors and measure their status accurately (Babbie, 2016).

3.2 Population and Sampling

This research was conducted in Wuhan, Hubei Province, China. We designated it as the study location because Wuhan was the first city to experience the COVID-19 pandemic and the first city to experience this crisis. Wuhan is a city at the local level with thirteen districts, each of which has an equal chance of being the target population. Consequently, numerous public members utilize the Weibo platform and observe the Weibo of the local government.

To assure the validity of the sample size and consider the essential characteristics of sampling in a study, we chose a sample representative of the entire population. Due to time and resource limitations, reaching the whole population of Wuhan's thirteen districts took much work. We selected ten districts as representative sample areas for the study based on the population proportion in Wuhan. Hongshan, Wuchang, Hanyang, Jiangan, Jianghan, Qiaokou, East-West Lake, Jiangxia, Qingshan, and Donghu Hi-Tech are these ten regions. These are the main urban areas of Wuhan, characterized by a high population density and prominent social media use. All respondents who were optionally scheduled were from the specified regions. This study's sample was restricted to Weibo users in Wuhan, Hubei Province. Additionally, these respondents were required to have followed local government posts on Weibo. If these two conditions were fulfilled, the subsequent interview of the interviewees would proceed. In addition, before completing the questionnaire, participants were informed that their identities would be kept confidential. Finally, 356 valid questionnaires were collected. (Table 1 provides a sample of the description.)

Table 1 : Sample of the description

Demographic variable	N (%)
Gender	
Male	156 (43.8%)
Female	200(56.2%)
Age	
≤19	69 (19.4%)
20–29	123 (34.6%)
30–39	79 (22.2%)
40–49	50 (14.0%)
50-59	35 (9.8%)
Education Level	
Senior high school and below	36 (10.1%)
College	107(30.1%)
Undergraduate	166 (46.6%)
Postgraduate and above	47 (13.2%)
Monthly Income (Chinese Yuan)	
≤3000	66 (18.5%)
3001–5000	126 (35.4%)
5001–8000	85 (23.9%)
8001–12,000	40 (11.2%)
≥12,000	39 (11.0%)
Occupation	
Student	41 (11.5%)
private enterprise staff	76 (21.3%)
Civil servants, staff of public institutions (except medical and educational and scientific institutions)	110 (30.9%)
Medical and nursing staff	23 (6.5%)
Service Industry Staff	20 (5.6%)
Self-employed	27 (7.6%)
Teacher	19 (5.3%)
Workers	10 (2.8%)
Farmers	3 (0.8%)
Others	27 (7.6%)
Years of Weibo use	
≤3 months	39(11.0%)
3 months≤1 years	57(16.0%)
1≤3 years	91(25.6%)
>3 years	168(47.4)
Hours of Weibo use per day	
≤30 minutes	31(8.7%)
30 minutes≤1h	41(11.5%)
1h≤3h	217(61.0%)
>3 h	67(18.8%)

3.3 Measures

This study's questionnaire is divided into two sections: The first section contains the respondents' personal information, including their gender, age, level of education, occupation, and Weibo usage preference. The second section of the questionnaire is the most important, and the scale used in the study was devised based on prior research. Regarding government Weibo use, consult Nan's (2014) study and combine it with this one. The existing government trust research scale is modified (Grimelikhuijsen & Knies, 2015). Regarding the government's credibility, we also cite the available research. Beldad, Geest, Jong, and Stehouhou (2012) created and modified a government credibility evaluation index system to assess the credibility of local governments. Kim and Lee (2012) developed four project indicators to measure government transparency. The measurement of public engagement was adjusted for the scale of Im et al. (2014).

Adapt the meter from Im et al. (2014) for public engagement. To assure the accuracy of the measurement results, we used 5-point Likert quantity tables for all items, and participants indicated their degree of agreement on each table. From 1 (meaning "strongly disagree") to 5 (meaning "strongly agree"), the ratings range. Table 2 displays the five structures, their Cronbach's alphas, and the standard load survey items corresponding to each system. Each structure-related variable was statistically significant ($p < 0.001$), indicating adequate similarity evidence.

3.4 Procedure

This study employs structural equation modeling (SEM) to validate the model empirically; thus, measurement models investigate the dependability and validity of latent variables, whereas structural models investigate hypothesized connections between structures (Kline, 1998). The measurement model was initially determined through exploratory factor analysis (EFA). Before this, Kaiser-Mayer-Olkin (KMO) was used to examine the adequacy of sampling, while Bartlett's test of sphericity determined the strength of the relationship between variables. Before proceeding with the EFA calculation, our measurements followed the data. Then, a verification factor analysis (CFA) is conducted to validate latent structures within structural relationships. Because this study entails mediation, it is crucial to identify indirect effects, including specific indirect effects between some of the mediating variables.

4、 RESULTS

4.1 Measurement model

First, we evaluated the model's dependability, convergence, and discrimination efficiency. When analyzing the questionnaire results, we determine the structural formula's reliability by calculating the composite reliability (CR) and Cronbach's alpha (CA). Our CR and CA meet the Gerbber and Anderson (1988) standards for measurement reliability. CR and CA must be greater than 0.7, indicating that the questionnaire volume table has high internal consistency and reliability. As shown in Table 3, the questionnaire results' CR and CA were more significant than or equal to 0.8. We initially examined the measurement model's dependability and convergence efficiency. When analyzing the study results, we calculated CA and CR. Gerbing & Anderson (1988) indicate that CR and CA values between 0.70 and 0.95 are acceptable. Table 2, where the CR and CA values for this questionnaire are more significant than 0.80.

Table 3 describes the mean (M), standard deviation (SD), and correlation for each variable, as well as each variable's significant influence on the other variables.

Table 2 : Results of reliability and convergent validity.

Variables	Item	Loadings	C.R.	A.V.E	C.A.
Government Weibo use (GwUs)	GwUs1	0.817	0.862	0.61	0.869
	GwUs2	0.797			
	GwUs3	0.758			
	GwUs4	0.756			
Trust in Government (TG)	TG1	0.818	0.83	0.619	0.829
	TG2	0.782			
	TG3	0.762			
Government transparency(GT)	GT1	0.842	0.89	0.67	0.896
	GT2	0.822			
	GT3	0.802			
	GT4	0.807			
Government credibility(GC)	GC1	0.792	0.902	0.604	0.91
	GC2	0.8			
	GC3	0.754			
	GC4	0.779			
	GC5	0.838			
	GC6	0.706			
Public engagement(PE)	PE1	0.722	0.813	0.593	0.817
	PE2	0.792			
	PE3	0.781			

Note(s):C.R.=composite reliability; A.V.E.=average variance extracted; C.A.=Cronbach's alpha

Table 3 : Mean, standard deviation, and correlations

Variable	M	S.D.	1	2	3	4	5
Government Weibo use (GwUs)	3.989	0.939	0.792				
Trust in Government (TG)	3.808	0.931	0.413	0.766			
Government transparency (GT)	3.604	1.037	0.472	0.356	0.826		
Government credibility (GC)	3.903	0.897	0.373	0.35	0.409	0.792	
Public engagement (PE)	3.725	0.927	0.476	0.426	0.498	0.511	0.777

4.2 Structural model

Using Amos, the established measurement models and hypotheses were then evaluated. The results of the ultimate structural model are displayed in Table 2. According to the model fitting index, the actual values of all fit indices exceed the recommended values, indicating that our model has a high degree of fitting merit (Browne & Cudeck, 1992; McDonald & Ho, 2002). According to Table 4, CMIN/df falls between 1 and 3, and its value of 1.197 is acceptable for this investigation. GFI is 0.948, which is significantly greater than 0.9. CFI = 0.992, more significant than 0.9, and AGFI = 0.932, substantially larger than 0.9. IFI = 0.992, which is greater than 0.9. RMSEA is 0.024, while NFI is 0.954, and NNFI is 0.994, and the more significant this value, the better the fitting model's performance. Consequently, model fitting is successful because the value the fitness index indicates is more suitable and acceptable than the recommended value. After establishing the applicability of the model, we evaluate our hypothesis.

Consequently, it was determined that for a measure to be significant ($p < 0.001$) at the 0.001 level, all its standard loading factors had to be greater than 0.6. In other words, local government Weibo significantly impacts government trust, transparency, and credibility, supporting hypotheses H1, H2, and H3. The use of local government affects public engagement significantly, supporting hypothesis H4.

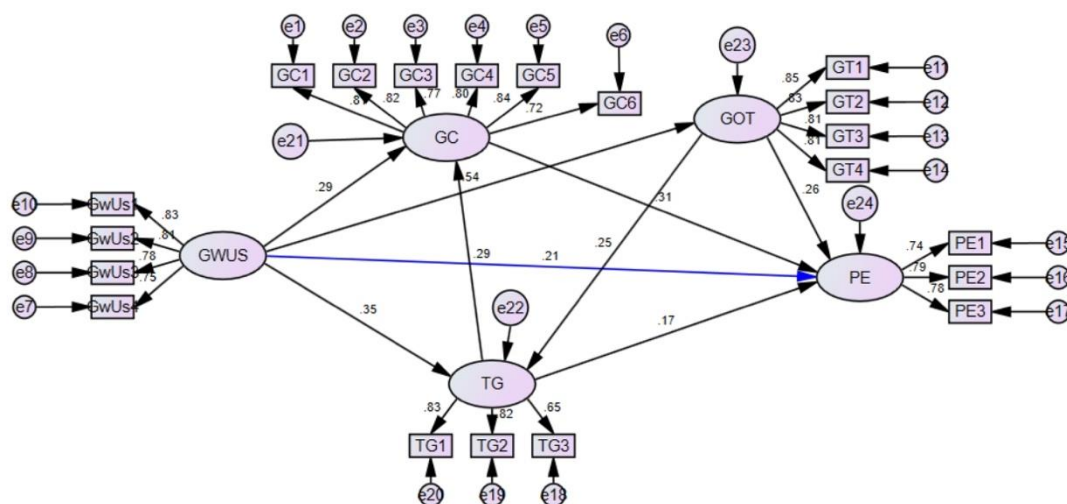


Figure 2 : SEM Path diagram

Table 4 : Model validation factor

Statistical validation	χ^2/df	GFI	RMSEA	TLI	CFI	NFI	NNFI	AGFI	IFI
Critical value	<3	>0.9	<0.10	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9
Testing results	1.197	0.948	0.024	0.991	0.992	0.954	0.994	0.932	0.992

Then, we conducted a mediation analysis, and Table 5 displays the results of the mediation model based on our theoretical framework. The mediation effect is significant when the lower 95% confidence interval (LLCI) and upper confidence interval (ULCI) of all mediation pathways are not zero. In this study's pathways, the 95% CI for the government mediation pathway, Weibo use - government trust - public engagement is between 0.027 and 0.114. The 95% CI for the path of government Weibo use - government transparency - public engagement is 0.043-0.145. The 95% CI for the path of government Weibo use - government credibility - public engagement is 0.014–0.091. Next, the mediated path between government Weibo use - government trust - government transparency - public engagement was analyzed with a 95% CI ranging from 0.006-0.036. The 95% CI for the path mediated by government Weibo use-government trust-government credibility-public engagement is 0.006-0.042. The 95% CI for the path mediated by government Weibo use-government transparency-government credibility-public engagement is 0.013–0.053. Moreover, the 95% CI for the mediated path of government Weibo use - government trust - government transparency - government trust - public engagement is between 0.002 and 0.013. According to the above results, 95% of all mediating factors' CI does not include 0. Therefore, government trust, credibility, and

transparency are mediating factors of government use and public engagement, and they are all present.

Table 5 : Analysis of specific indirect effects

Mediation pathway	Effect	Boot se	LLCI	ULCI
GwUs – TG– PE	0.067	0.022	0.027	0.114
GwUs – GT– PE	0.090	0.026	0.043	0.145
GwUs– GC– PE	0.049	0.020	0.014	0.091
GwUs– TG –GT – PE	0.018	0.008	0.006	0.036
GwUs – TG – GC – PE	0.022	0.009	0.006	0.042
GwUs – GT – GC – PE	0.029	0.010	0.013	0.053
GwUs– TG – GT – GC – PE	0.006	0.003	0.002	0.013

Note(s):GwUs=Government Weibo Use; TG= Government Trust; GC=Government Credibility; GT=Government Transparency;PE=Public Engagement.

5、 DISCUSSION AND CONCLUSION

This survey is based on a data sample of 356 Wuhan, China, residents. Investigate the impact of local government Weibo on public engagement through the lens of government trust, credibility, and transparency.

The results of this study indicate that the use of Weibo by municipal governments affects the government's credibility, trust, and transparency. The public's comprehension and interaction with the information that local governments publish on Weibo positively impact its credibility and trust. Additionally, local government Weibo influences government transparency and public engagement.

During COVID-19, the mediation analysis results revealed that the government's Weibo use and public engagement by the local government had an indirect effect. The study demonstrates that numerous factors are required to influence the use of Weibo by local governments to increase public engagement. Therefore, it is essential to correctly mediate the influencing factors among themselves to reduce their impact on public engagement.

According to mediation analysis, the variables influencing local government Weibo and public engagement are government trust, transparency, and credibility. This will aid in locating the most important and efficient intermediary paths. In the era of social media, particularly during the COVID-19 pandemic, the relationship between local government Weibo and public engagement fascinated us. The world desires to strengthen the relationship between the public and local governments through social media, primarily because the public desires a more favorable opinion of local governments. Specifically, the government's use of social media platforms can help increase the public's positive attitudes toward the government regarding trust, credibility, and transparency (Jia et al., 2019).

The study discovered that government credibility, trust, and transparency played a significant indirect role in government Weibo use and public engagement throughout COVID-19. Therefore, we found that if local governments can effectively use social media to spread crisis information, they can increase their credibility, trust, and transparency. People's willingness to choose and give attention to local government Weibo reflects, to some extent, their trust in the government; therefore, the correct use of local government Weibo will increase the public's positive perception of local government. This also suggests a clear link between

government trust, transparency, and credibility in countries with solid public-government relations.

This paper examines a study of the effect of local governments' use of Weibo for crisis communication on public engagement during the COVID-19 outbreak. Local governments and the public are more cohesive and can interact more effectively than at the national level. It is difficult for Chinese citizens to obtain direct information from the highest levels of government. However, local governments can provide the public with more details by decentralizing information layer by layer. Consequently, this study focuses on local governments. It investigates the public's use of Weibo platforms to effectively communicate with local administrations during times of crisis, which can have a positive effect. This gives local government leaders a new impetus to engage in social media communication through effective crisis management. Moreover, by adopting the proper crisis communication strategy to increase government trust, credibility, and transparency, they can elicit positive responses from their audiences on social media and pave a new path for harmonious social development.

Examining public engagement by exploring the use of Weibo by local governments and the public's engagement with trust, credibility, and transparency in government is of great interest. This study focuses on Wuhan, China, the city that encountered the first outbreak of COVID-19. In addition, Wuhan was the first city to undergo a 77-day "lockdown" beginning January 23, 2020. This epidemic's swift spread has frightened the public. Considering this, the public has no option but to place its trust in the local government, await its decision, and take various measures to resolve the situation.

Consequently, the use of social media became crucial during the epidemic. During the epidemic, the public had access to a wealth of information via the Weibo platform, which assisted the local government in Wuhan in controlling the spread of the disease and preserving social stability to the greatest extent possible. Therefore, effective communication is necessary to protect public health and safety. The public's perceptions of the government's trust, credibility, and transparency play a crucial role in determining how governments should use Weibo to influence public engagement.

This study aims to examine the impact of local government Weibo on public engagement by developing a model that integrates government trust, credibility, and transparency based on relevant theoretical background and existing literature. Evaluate the impact of local government Weibo on public engagement under the influence of these mediating variables. This research is essential. The study demonstrates that local governments can utilize new media to publicize and resolve problems during the COVID-19 crisis, significantly influencing government trust, credibility, and transparency and boosting public engagement. Through this research, we can aid local governments in communicating with the public and sustaining a more peaceful living environment during a crisis.

According to the study, there are also numerous applicable recommendations. In particular, the frequency of current crisis events in various countries and regions is high, and the advent of the social media era will eliminate informational barriers across time and space. Moreover, people are less interested in merely being informed and more inclined to participate. Consequently, if local governments wish to develop harmoniously, they should learn and make effective use of new media, beginning with government transparency, to increase public trust in government, improve government credibility, provide better services to the public, and allow public engagement in them to actively form an excellent interactive relationship.

This research is based solely on Weibo, China's most popular social media platform, and Wuhan residents. It may not reflect the perspectives and attitudes of all Chinese. Due to the cross-sectional nature of the current data compilation, sample bias is unavoidable. Consequently, future research could expand the scope to a broader area to produce more precise data.

References

- Alford, J. (2002). Defining the Client in the Public Sector: A Social-Exchange Perspective. *Public Administration Review*, 62(3), 337–346. <https://doi.org/10.1111/1540-6210.00183>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Avery, E. J. (2017). Public information officers' social media monitoring during the Zika virus crisis, a global health threat surrounded by public uncertainty. *Public Relations Review*, 43(3), 468–476. <https://doi.org/10.1016/j.pubrev.2017.02.018>
- Ayres, I., & Braithwaite, J. (1992). *Responsive regulation: Transcending the deregulation debate*. Oxford University Press, USA.
- BĂTRÂNCEA, L., & Anca NICHITA. (2015). Which is the Best Government? Colligating Tax Compliance and Citizens' Insights Regarding Authorities' Actions. Bătrâncea, Larissa, and Anca Nichita. "Which Is the Best Government? Colligating Tax Compliance and Citizens' Insights Regarding Authorities' Actions." *Transylvanian Review of Administrative Sciences*, 11, no. 44 (2015): 5-22.
- Beeri, I., Uster, A., & Vigoda-Gadot, E. (2018). Does Performance Management Relate to Good Governance? A Study of Its Relationship with Citizens' Satisfaction with and Trust in Israeli Local Government. *Public Performance & Management Review*, 42(2), 241–279. <https://doi.org/10.1080/15309576.2018.1436074>
- Beldad, A., van der Geest, T., de Jong, M., & Steehouder, M. (2012). Shall I Tell You Where I Live and Who I Am? Factors Influencing the Behavioral Intention to Disclose Personal Data for Online Government Transactions. *International Journal of Human-Computer Interaction*, 28(3), 163–177. <https://doi.org/10.1080/10447318.2011.572331>
- Berlilana, B., Hariguna, T., & Lai, M. T. (2018). Effects of Relationship Quality on Citizen Intention Use of E-government Services: An Empirical Study of E-government System. *International Journal of Electrical and Computer Engineering (IJECE)*, 8(6), 5127. <https://doi.org/10.11591/ijece.v8i6.pp5127-5133>
- Bomsel, O. (2014). Is China a Weibo democracy. *International Relations and Diplomacy*, 2(2), 120-132.
- Browne, M. W., & Cudeck, R. (1992). Alternative Ways of Assessing Model Fit. *Sociological Methods & Research*, 21(2), 230–258. <https://doi.org/10.1177/0049124192021002005>
- Carpenter, D. (2014). *Reputation and Power*. Princeton University Press. <https://doi.org/10.1515/9781400835119>
- Chen, J., & She, J. (2012). An Analysis of Verifications in Microblogging Social Networks -- Sina Weibo. 2012 32nd International Conference on Distributed Computing Systems Workshops, <https://doi.org/10.1109/icdcs.2012.68>

- Cook, T. E., & Gronke, P. (2005). The Skeptical American: Revisiting the Meanings of Trust in Government and Confidence in Institutions. *The Journal of Politics*, 67(3), 784–803. <https://doi.org/10.1111/j.1468-2508.2005.00339.x>
- Da Silva, R., & Batista, L. (2007). Boosting government reputation through CRM. *International Journal of Public Sector Management*, 20(7), 588–607. <https://doi.org/10.1108/09513550710823506>
- Dickson, E. S., Gordon, S. C., & Huber, G. A. (2009). Enforcement and Compliance in an Uncertain World: An Experimental Investigation. *The Journal of Politics*, 71(4), 1357–1378. <https://doi.org/10.1017/s0022381609990235>
- Glik, D. C. (2007). Risk Communication for Public Health Emergencies. *Annual Review of Public Health*, 28(1), 33–54. <https://doi.org/10.1146/annurev.publhealth.28.021406.144123>
- Gofen, A. (2014). Reconciling policy dissonance: patterns of governmental response to policy noncompliance. *Policy Sciences*, 48(1), 3–24. <https://doi.org/10.1007/s11077-014-9202-9>
- Golbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter use by the U.S. Congress. *Journal of the American Society for Information Science and Technology*, 61(8), 1612–1621. <https://doi.org/10.1002/asi.21344>
- Grimmelikhuisen, S. (2012). Linking transparency, knowledge and citizen trust in government: an experiment. *International Review of Administrative Sciences*, 78(1), 50–73. <https://doi.org/10.1177/0020852311429667>
- Grimmelikhuisen, S., Jilke, S., Olsen, A. L., & Tummers, L. (2016). Behavioral Public Administration: Combining Insights from Public Administration and Psychology. *Public Administration Review*, 77(1), 45–56. <https://doi.org/10.1111/puar.12609>
- Grimmelikhuisen, S., & Knies, E. (2015). Validating a scale for citizen trust in government organizations. *International Review of Administrative Sciences*, 83(3), 583–601. <https://doi.org/10.1177/0020852315585950>
- Grimmelikhuisen, S., Porumbescu, G., Hong, B., & Im, T. (2013). The Effect of Transparency on Trust in Government: A Cross-National Comparative Experiment. *Public Administration Review*, 73(4), 575–586. <https://doi.org/10.1111/puar.12047>
- Gu, Q. (2014, April). Sina Weibo: a mutual communication apparatus between the Chinese government and Chinese citizens. *China Media Research*, 10(2), 72.
- Halachmi, A., & Greiling, D. (2013). Transparency, E-Government, and Accountability. *Public Performance & Management Review*, 36(4), 572–584. <https://doi.org/10.2753/pmr1530-9576360404>
- Han, X., Wang, J., Zhang, M., & Wang, X. (2020). Using Social Media to Mine and Analyze Public Opinion Related to COVID-19 in China. *International Journal of Environmental Research and Public Health*, 17(8), 2788. <https://doi.org/10.3390/ijerph17082788>
- Hong, H. (2013). Government websites and social media's influence on government-public relationships. *Public Relations Review*, 39(4), 346–356. <https://doi.org/10.1016/j.pubrev.2013.07.007>
- Im, T., Cho, W., Porumbescu, G., & Park, J. (2012). Internet, Trust in Government, and Citizen Compliance. *Journal of Public Administration Research and Theory*, 24(3), 741–763. <https://doi.org/10.1093/jopart/mus037>
- Jia, Z., Liu, M., & Shao, G. (2018). Linking government social media usage to public perceptions of government performance: an empirical study from China. *Chinese Journal of Communication*, 12(1), 84–101. <https://doi.org/10.1080/17544750.2018.1523802>

- Jimenez, P., & Iyer, G. S. (2016). Tax compliance in a social setting: The influence of social norms, trust in government, and perceived fairness on taxpayer compliance. *Advances in Accounting*, 34, 17–26. <https://doi.org/10.1016/j.adiac.2016.07.001>
- Kline, R. B. (1998). Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of psychoeducational assessment*, 16(4), 343-3
- Kim, S., & Lee, J. (2012). E-Participation, Transparency, and Trust in Local Government. *Public Administration Review*, 72(6), 819–828. <https://doi.org/10.1111/j.1540-6210.2012.02593.x>
- Liao, Q., Yuan, J., Dong, M., Yang, L., Fielding, R., & Lam, W. W. T. (2020). Public Engagement and Government Responsiveness in the Communications About COVID-19 During the Early Epidemic Stage in China: Infodemiology Study on Social Media Data. *Journal of Medical Internet Research*, 22(5), e18796. <https://doi.org/10.2196/18796>
- Liu, W., & Liu, W. (2016, August 1). Temporal Accommodation in Government-public Interactions on Chinese Government Weibo in Emergency Context. *Www.atlantis-Press.com; Atlantis Press*. <https://doi.org/10.2991/icassr-15.2016.65>
- Liu, Y., Zhou, Y., & Liu, G. (2012, June 1). Chinese government use of social media: A case of Shanghai Weibo @Shanghaicity. *IEEE Xplore*. <https://doi.org/10.1109/DEST.2012.6227946>
- MA, L. (2016). PERFORMANCE MANAGEMENT AND CITIZEN SATISFACTION WITH THE GOVERNMENT: EVIDENCE FROM CHINESE MUNICIPALITIES. *Public Administration*, 95(1), 39–59. <https://doi.org/10.1111/padm.12275>
- Ma, L., & Zheng, Y. (2017). National e-government performance and citizen satisfaction: a multilevel analysis across European countries. *International Review of Administrative Sciences*, 85(3), 506–526. <https://doi.org/10.1177/0020852317703691>
- Mazzurco, S. (2012). E-Citizenship: Trust in Government, Political Efficacy, and Political Participation in the Internet Era. *Electronic Media & Politics*, 1(8), 119–135.
- McDonald, R. P., & Ho, M.-H. R. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods*, 7(1), 64–82. <https://doi.org/10.1037/1082-989x.7.1.64>
- McNeal, R., Hale, K., & Dotterweich, L. (2008). Citizen–Government Interaction and the Internet: Expectations and Accomplishments in Contact, Quality, and Trust. *Journal of Information Technology & Politics*, 5(2), 213–229. <https://doi.org/10.1080/19331680802298298>
- MISHLER, W., & ROSE, R. (2001). What Are the Origins of Political Trust? *Comparative Political Studies*, 34(1), 30–62. <https://doi.org/10.1177/0010414001034001002>
- Murphy, P., & Greenhalgh, K. (2016). Joint University Research Group response to the Scottish Government consultation: Fire and rescue framework for Scotland 2016.
- Nan, Z., Cong, Y., Qinguo, M., & Xunhua, G. (2014, January). The orientation-maturity framework for understanding the e-government key issues in China. In *2014 47th Hawaii International Conference on System Sciences* (pp. 1916-1925). IEEE.
- Porumbescu, G. A. (2015). Comparing the Effects of E-Government and Social Media Use on Trust in Government: Evidence from Seoul, South Korea. *Public Management Review*, 18(9), 1308–1334. <https://doi.org/10.1080/14719037.2015.1100751>
- Porumbescu, G. A. (2016). Linking public sector social media and e-government website use to trust in government. *Government Information Quarterly*, 33(2), 291–304. <https://doi.org/10.1016/j.giq.2016.04.006>

- Roberts, N. (2004). Public Deliberation in an Age of Direct Citizen Participation. *The American Review of Public Administration*, 34(4), 315–353. <https://doi.org/10.1177/0275074004269288>
- Rubin, A., & Babbie, E. R. (2016). *Empowerment series: Research methods for social work*. Cengage Learning.
- Rudolph, T. J. (2009). Political Trust, Ideology, and Public Support for Tax Cuts. *Public Opinion Quarterly*, 73(1), 144–158. <https://doi.org/10.1093/poq/nfp012>
- Scholz, J. T. (1998). Trust, taxes, and compliance. *Trust and governance*, 135.
- Siyam, N., Alqaryouti, O., & Abdallah, S. (2020). Mining government tweets to identify and predict citizens engagement. *Technology in Society*, 60, 101211. <https://doi.org/10.1016/j.techsoc.2019.101211>
- Song, C., & Lee, J. (2015). Citizens' Use of Social Media in Government, Perceived Transparency, and Trust in Government. *Public Performance & Management Review*, 39(2), 430–453. <https://doi.org/10.1080/15309576.2015.1108798>
- Song, Y., Xia, Y., Fang, D., & Wang, C. (2020). A Novel Coronavirus Pneumonia Epidemic Model Under the Background of Media Information Dissemination. 2020 International Conference on Robots & Intelligent System (ICRIS). <https://doi.org/10.1109/icris52159.2020.00097>
- Sternstein. (2010). Study links online transparency efforts, trust in government. Nextgov.com. <https://www.nextgov.com/cxo-briefing/2010/02/study-links-online-transparency-efforts-trust-in-government/45965/>
- Tian, F., Li, H., Tian, S., Yang, J., Shao, J., & Tian, C. (2020). Psychological symptoms of ordinary Chinese citizens based on SCL-90 during the level I emergency response to COVID-19. *Psychiatry Research*, 288, 112992. <https://doi.org/10.1016/j.psychres.2020.112992>
- Wang, C. (2014). Antecedents and consequences of perceived value in Mobile Government continuance use: An empirical research in China. *Computers in Human Behavior*, 34, 140–147. <https://doi.org/10.1016/j.chb.2014.01.034>
- Wang, X., & Van Wart, M. (2007). When Public Participation in Administration Leads to Trust: An Empirical Assessment of Managers' Perceptions. *Public Administration Review*, 67(2), 265–278. <https://doi.org/10.1111/j.1540-6210.2007.00712.x>
- Weymouth, R., & Hartz-Karp, J. (2019). Participation in planning and governance: closing the gap between satisfaction and expectation. *Sustainable Earth*, 2(1). <https://doi.org/10.1186/s42055-019-0012-y>
- Wigand, F. D. L. (2010, May). Twitter takes wing in government: diffusion, roles, and management. In *Proceedings of the 11th annual international digital government research conference on public administration online: Challenges and opportunities* (pp. 66-71).
- Zeng, R., & Li, M. (2020). Half a Loaf is Better than No Bread: Social Media Use by the Centers for Disease Control and Prevention (CDC) in Mainland China (Preprint). *Journal of Medical Internet Research*. <https://doi.org/10.2196/19470>
- Zhu, J., & Hou, H. (2021). Research on User Experience Evaluation of Mobile Applications in Government Services. *IEEE Access*, 9, 52634–52641. <https://doi.org/10.1109/access.2021.3070365>