

The Role of Social Media in Crisis Communication during COVID-19 Period

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Abstract: The COVID-19 pandemic continues to cause great impact on countries around the world. During this health crisis, political communication is crucial as the government's ability to govern is challenged and it needs to make timely decisions that will affect a large number of people based on the spread of the virus. COVID-19 is changing the way people interact with each other, and social media is playing a more important role in people's social life than ever before. Due to its convenience in obtaining information and its widespread application, social media has become an important channel for the government and the public to participate in crisis management. From the perspective of social-mediated crisis communication (SMCC) and media richness, this paper mainly analyzes the roles of social media in COVID-19 crisis communication from the aspects of communication efficiency, social solidarity, information epidemic and celebrity effects, thereby providing the government with recommendations for a more comprehensive understanding and employment of social media in COVID-19 crisis communication.

Keywords: social media, COVID-19, information, social-mediated crisis communication

1. Introduction

Due to the extensive use, interactivity, convenience and timeliness in obtaining information, social media has become an important channel for the government to communicate with the public. During COVID-19, the social distancing in reality has also emphasized the role and influence of social media [1]. Past practice and research show that social media is a common means for modern governments to communicate in the face of disasters and crises, and plays an important role in early warning, post-disaster recovery and reconstruction. Early in the H1N1 pandemic, the US Centers for Disease Control and Prevention adopted social media features such as blogging, image sharing, and online video to raise public awareness [2]. In 2016, the governments of four Italian regions affected by earthquakes (Abruzzo, Lazio, Marche and Umbria) used Twitter to post 349 quake-related messages over a five-month period, among them, information about helping the victims (donations, volunteering) receives the greatest attention [3].

Social media has played a similarly positive role in the COVID-19 pandemic. For example, social media promoted risk communication, promoted interaction and communication efficiency [4], and became a means for people to seek help in the early stage of the epidemic [5]. Scholars have found that social media can be used to predict the current number of COVID-19 cases in a certain region, which could help policy response [6]. COVID-19 crisis communication through social media can also

play a role in political coordination and mobilization, promoting policy legitimization and efficient operation. For example, social media has been used to mobilize citizens and non-profit organizations to support government response and recovery efforts, reduce frictions between different levels of government [7], communicate and facilitate stakeholder engagement [8], and increase public recognition of politicians and their policies [9].

However, social media does not always play the desired positive role. The complexity of its users makes it, like all social products, also have a negative side. First of all, due to the anonymity of social media and huge public concern about the crisis, rumors are more likely to be fabricated and spread by people with ulterior motives in social media, and information deviating from the truth may also be mixed in [10]. Secondly, the discussion about COVID-19 on social media sometimes goes beyond the virus itself. Many issues that are politicized and amplify the negative impact may damage the government's reputation and hinder action [11]. Thirdly, psychological problems caused by the COVID-19 disaster may also be aggravated by the recurrence and amplification of social media [12].

This paper analyzes following questions: why it is both important and challenging to communicate the COVID-19 crisis through social media; what role social media plays in the government's COVID-19 crisis communication; what helped defuse the crisis while the others exacerbated it. This paper makes a comprehensive analysis of the advantages and risks of using social media for COVID-19 crisis communication combined with the latest political context. In doing so, this study re-examines the unique role of social media in crisis communication and learn how to properly use this tool to help humans fight COVID-19 and bridge the gap between government and the public.

2. Social Media During the COVID-19 Crisis

2.1. Politicized Issue

Amid a health crisis in which the pandemic has affected the lives of a nationwide public, the government's ability to govern has drawn significant attention, including among dissidents. In this context, the discussion of COVID-19 crisis on social media cannot be separated from political topics. Whether appropriate or not, when the COVID-19 crisis is treated as a political event, controversy is inevitable, actions are put on hold and a range of government policies are stymied. This is a huge challenge for crisis communication and management itself.

In some countries, disobedience to social distancing policies has been linked to ideology, and the COVID-19 pandemic has increased political polarization. Scholars found that politicians get as much exposure on network news as scientists [13], many politicians and the news media view prevention requirements (such as mask wearing and social distancing) as a means of political competition, and there is great disagreement across the political spectrum as to whether these policies should be followed [11]. Even worse, some politicized discussions may also be related to conspiracy theories and rumors. An investigation by the New York Times revealed that during the pandemic, 37% of users on platforms such as Facebook were exposed to a large number of misleading and disinformation produced or pushed by bots and spread maliciously for political purposes [14]. In conclusion, politicized discussions on social media can easily involve the public in political debates and affect the acquisition of scientific epidemic prevention information.

2.2. Debate Over the Long-term Effects of COVID-19 Policies

Since the outbreak, there has been debate about how strict pandemic prevention and quarantine measures should be done due to the huge impact on lives and economic development. While some countries have declared the end of the epidemic, it must be acknowledged that nearly three years after the outbreak, the world is still reeling from the impact of COVID-19. In the early days of the outbreak, the corona virus was new, unfamiliar and frightening to humans. After a long period of pandemic,

however, the virus has become familiar to humans, governments have accumulated experience in prevention and control, and vaccines have been developed, which has significantly reduced the global mortality rate. At the same time, there still seems to be no evidence that the virus will disappear completely in the short term

Under these circumstances, the value of the life-saving benefits of strict quarantine policies, such as lockdowns, decreases relative to the value of sacrifices, such as economic development, and opponents of strict quarantine policies are more numerous and aggressive than before. For instance, school closures and business shutdowns have led to an immediate reduction on cases. However, the consequences, such as a decline in economic growth and a drain on medical resources for other diseases, are also evident [15]. Therefore, it is not clear whether a loose or strict quarantine policy will work better in the long run, such debates are likely to persist on social media with the corona virus.

3. The Role of Social Media in COVID-19 Crisis Communication

3.1. Theory of Social-Mediated Crisis Communication

To develop an understanding of the specific impact and role of social media in crisis communication, this paper will apply social-mediated crisis communication theory as an analytical tool. Social-mediated crisis communication theory, as Lucinda Austin, Brooke Fisher Liu and Yan Jin (2010) put, focuses on how individuals and organizations use social media to communicate in the event of organizational crises [16]. According to the SMCC model, the public will seek inside information through social media during the crisis, and the advantages of social media compared with traditional media also enable organizations to timely intervene in crisis management and form a two-way interaction.

Developed from traditional crisis communication theory, the SMCC model takes social media as a core in crisis communication and divides the public into three types (influential social media creators, social media followers and social media inactive users) according to different behavior patterns in the process of crisis information production and consumption. It distinguishes social media, traditional media and offline word-of-mouth. This study applies this theory to analyze the motivation and effect of the public using social media to obtain information during the COVID-19 crisis.

3.2. Narrowing the Information Gap

In crisis communication, information is the main goal pursued by the public and also the key to carry out communication. When a disaster crisis breaks out, the public is always short of information, not only to understand the cause of the crisis, but also fear and safety needs will push them to get information as soon as possible. According to the theory of media richness, the choice of communication media depends on the task of communication and the characteristics of communication media. When the communication task is to transfer explicit knowledge, managers tend to use media with low richness to communicate; when the communication task is to transfer tacit knowledge, managers tend to use media with high richness to communicate [17]. Rich media can overcome different knowledge backgrounds or clarify unclear issues, so that both sides of communication can reach agreement or consensus. As a public health crisis, COVID-19 is a complex problem that requires expertise to deal with, and social media is a medium of high richness, thus becoming the preferred communication medium for the government in COVID-19 crisis communication. A representative example is that within the first three months of the COVID-19 outbreak in China, 120 official Chinese government social media accounts published more than 35,000 epidemic-related Weibo posts [18]. Social media can promote information sharing during the

crisis, provide a place for interaction between the government and the public, and improve the efficiency of crisis communication.

3.3. Improving Compliance

Citizen compliance contributes to the formation of social solidarity and facilitates the legitimacy and efficient implementation of policies, which is particularly critical in the context of the COVID-19 pandemic. Citizen compliance “conforming behavior to a standard of conduct that is set by normative or political means” [19]. At the early stage of the epidemic, the compliance of government directives varied greatly among countries [20], and the long-term epidemic had a serious impact on the lives of most people, leading to increasing opponents of COVID-19 policies and epidemic fatigue. SMCC theory states that information and emotional needs are the main motivations for people to use social media. During the crisis, releasing the information that the public is interested in and the policy basis to be adopted through social media can meet the information and emotional needs of the public, thereby increasing the transparency of the government and public trust, and bringing a good environment for the implementation of policies. In China, for example, the government disseminated a lot of information to the public through official social media accounts, such as releasing new cases and their travel histories, reporting heroic stories, and live broadcasting the construction process of two temporary hospitals during the epidemic prevention and control in Wuhan, which played a role in emotional support and rallying the public.

3.4. Generating Disinformation

It cannot be denied that social media has brought great convenience to people’s access to information. When disasters and crises occur, people’s use of social media will also increase significantly, which can play a huge advantage in crisis communication. However, we must also recognize that social media has its limitations. One of the most prominent drawbacks is that social media is difficult to filter information due to its anonymity and openness, and can easily become a factory for generating disinformation and rumors. There are three main types of harm caused by disinformation in the COVID-19 pandemic: providing false guidance, promoting hatred and spreading fear. They promote ineffective and even dangerous methods as prevention and treatment, mix rebellion and xenophobia into the epidemic through fabrication and discrimination, or stoke public panic by claiming that the virus has spread on a large scale. Among the typical rumors posted on Weibo’s official rumor dispelling account, there are many shocking examples, such as “Shuanghuanglian oral liquid can suppress the coronavirus”, “Mother of a two-year-old girl in Shanghai committed suicide after her daughter was quarantined for treatment”, and “The state will no longer provide free treatment for COVID-19 patients”. In disasters and crises, with the surge in the number of users and the spread of panic, the scale and harm of rumors on social media became more serious, resulting in an “information epidemic” with the spread of COVID-19. On China’s internet joint rumor dispelling platform, which records many seemingly absurd rumors that have caused widely spread, 409 related articles can be found just by searching for the keyword “pandemic” (data for September 24). According to the publicity data of the official Weibo account “Weibo Rumor Dispelling”, from April 12 to April 27, 2022, Weibo dealt with a total of 2,139 rumors related to the Shanghai epidemic and 204 accounts, including 478 rumors on April 18 alone (All data identified through Sina Weibo platform using the advance search function. The data collection period is between April 12 2022 and April 27 2022). For the purpose of politicizing COVID-19 and opposing COVID-19 policies, these rumors mislead the public by fabricating facts. Amplified by social media and influenced by the COVID-19 crisis, the harm and difficulty of governance are far beyond normal circumstances.

3.5. Expanding Information Dissemination Through Celebrities

According to SMCC theory, the reason why rumors get viral spread in social media is probably related to the way people get information. The information not only comes from organizations experiencing crisis, but also is produced by the influential social media creators, who disseminate the information directly to their followers, and possibly indirectly to social media inactive people through their followers [16]. COVID-19 has disrupted the normal perception of people, creators' works appear in spurts, and it takes time to prove their authenticity. The amount of information released by authorities is far less than that of social media creators, and the average user will be surrounded by messages created by social media creators. Especially if a user does not trust the government or is not particularly aware of the official information, then he will be easily misled by rumors. As a result, the average user of social media will be heavily influenced by the creators of social media during the COVID-19 crisis.

According to this theory, the status of each user in social media is not equal, and celebrity effect plays an important role in crisis communication. They expand the speed and influence of information, and ultimately the impact depends on how they process or manufacture information.

If the influential social media creators spread rumors and hate, these messages could have severe impact and lead to unpredictable social problems. Former U.S. President Donald Trump repeatedly accused the coronavirus of being a “Chinese virus” on social media, to deflect domestic political conflicts and reduce the pressure of epidemic prevention and control. The social media backlash has indirectly led to Asian-American hate crimes. According to a report released by the anti-discrimination group Stop AAPI Hate, since 2020, there has been a high incidence of discrimination and hate incidents against Asian people in the United States, especially those of Chinese descent. Between March 19, 2020, and March 31, 2022, 11467 Asian-hate incidents were reported to the group [21]. Another report earlier this year by the Center for the Study of Hate and Extremism at California State University, San Bernardino, showed that hate crimes against Asians in the major cities of United States increased 224% in 2021 from 2020 [22]. However, as long as the information spread is correct, the positive impact of celebrity effect is also profound. For example, Zhong Nanshan, China's leading expert in the fight against COVID-19, released the news confirming the human-to-human transmission of the coronavirus for the first time, which attracted wide public attention and served as a warning, providing a foundation for the subsequent rapid government decision and citizen compliance.

4. Conclusions

This paper discusses the complex role of social media in COVID-19 crisis communication. Although its positive impact should never be ignored, this paper focuses more on the huge risks of social media in crisis communication in the current time of epidemic fatigue. Social media has provided people with convenient access to information and contributed to the safety and solidarity of the public. However, the politicization of COVID-19 issues and the debate on the effects of COVID-19 policies have not yet made the COVID-19 pandemic a crisis that the whole people can face together, and there are huge differences among people on social media. Therefore, the government should use this tool carefully, focusing on how to reverse its adverse effects while seeking advantages.

First of all, the government should attach importance to the governance of rumors, cooperate with as many mainstream media as possible to refute rumors quickly, increase investment in rumor monitoring platforms. In addition, those who spread rumors should be held accountable in a timely manner according to the spread scope. Second, attach importance to the influence of the opinions of influential social media creators and celebrities in social media, reverse the one-to-many communication mindset, and realize that the middle of the communication bridge is not empty. For

example, working with a large number of medical experts and encouraging them to communicate directly with the public via social media can both refute rumors through scientific knowledge and greatly improve communication efficiency. Third, government can let the street-level bureaucrats play a role in policy communication, improve the efficiency of communication while buffering contradictions. They are directly responsible for local people's epidemic prevention work and have their own social network, which is related to the direct perception of the COVID-19 policy. Therefore, it is important to focus on training them to ensure well interaction with people, so that they can also become the influential social media creators in their region, which can enable them to communicate COVID-19 policy and prevention guide with local people. In this way, the official celebrity effect can be formed, so that the government can occupy the active position of crisis information dissemination as much as possible.

References

- [1] Sandoval-Almazan R., and Valle-Cruz D., (2021) *Social media use in government health agencies: The COVID-19 impact*, IP, vol. 26, no. 4, pp. 459–475, doi: 10.3233/IP-210326.
- [2] Veil S.R., Buehner T., and Palenchar M.J., (2011) *A Work-In-Process Literature Review: Incorporating Social Media in Risk and Crisis Communication*, *Journal of Contingencies and Crisis Management*, vol. 19, no. 2, pp. 110–122, doi: 10.1111/j.1468-5973.2011.00639.x.
- [3] Splendiani S., and Capriello A., (2022) *Crisis communication, social media and natural disasters - the use of Twitter by local governments during the 2016 Italian earthquake*, *Corporate Communications: An International Journal*, vol. 27, no. 3, pp. 509–526, doi: 10.1108/CCIJ-03-2021-0036.
- [4] Zhang X., and Huang R., (2021) *The role of social media in public crisis governance*, *E3S Web Conf.*, vol. 253, pp. 01066, doi: 10.1051/e3sconf/202125301066.
- [5] Saud M., Mashud M., and Ida R., (2020) *Usage of social media during the pandemic: Seeking support and awareness about COVID-19 through social media platforms*, *Journal of Public Affairs*, vol. 20, no. 4, p. e2417, doi: 10.1002/pa.2417.
- [6] Lu G., Lu L., Li Y., and Wang C., (2021) *Nowcasting based on topic type: Using social media to predict the number of confirmed COVID-19 cases*, *Chinese Journal of Computer-Mediated Communication*, no. 4, pp. 93–117.
- [7] Li Y., Chandra Y., and Kapucu N., (2020) *Crisis Coordination and the Role of Social Media in Response to COVID-19 in Wuhan, China*, *The American Review of Public Administration*, vol. 50, no. 6–7, pp. 698–705, doi: 10.1177/0275074020942105.
- [8] Fissi S., Gori E., and Romolini A., (2022) *Social media government communication and stakeholder engagement in the era of Covid-19: evidence from Italy*, *IJPSM*, vol. 35, no. 3, pp. 276–293, doi: 10.1108/IJPSM-06-2021-0145.
- [9] London J., and Matthews K., (2022) *Crisis communication on social media - lessons from Covid-19*, *Journal of Decision Systems*, vol. 31, no. 1–2, pp. 150–170, doi: 10.1080/12460125.2021.1926612.
- [10] Gottlieb M., and Dyer S., (2020) *Information and Disinformation: Social Media in the COVID-19 Crisis*, *Academic Emergency Medicine*, vol. 27, no. 7, pp. 640–641, doi: 10.1111/acem.14036.
- [11] Sylvester S.M., (2021) *COVID-19 and Motivated Reasoning: The Influence of Knowledge on COVID-Related Policy and Health Behavior*, *Social Science Quarterly*, vol. 102, no. 5, pp. 2341–2359, doi: 10.1111/ssqu.12989.
- [12] Zhao N., and Zhou G., (2020) *Social Media Use and Mental Health during the COVID-19 Pandemic: Moderator Role of Disaster Stressor and Mediator Role of Negative Affect*, *Applied Psychology: Health and Well-Being*, vol. 12, no. 4, pp. 1019–1038, doi: 10.1111/aphw.12226.
- [13] Hart P.S., Chinn S., and Soroka S., (2020) *Politicization and Polarization in COVID-19 News Coverage*, *Science Communication*, vol. 42, no. 5, pp. 679–697, doi: 10.1177/1075547020950735.
- [14] Koeze E., and Popper N., (2020) *The Virus Changed the Way We Internet*. <https://www.nytimes.com/interactive/2020/04/07/technology/coronavirus-internet-use.html>.
- [15] Geloso V., (2021) *Conceptualizing the Cost of COVID Policy: The Role of Institutional Trade-Offs*, *The Economists' Voice*, vol. 18, no. 1, pp. 129–136, doi: 10.1515/ev-2021-0020.
- [16] Austin L., Fisher Liu, and Jin Y., (2012) *How Audiences Seek Out Crisis Information: Exploring the Social-Mediated Crisis Communication Model*, *Journal of Applied Communication Research*, vol. 40, no. 2, pp. 188–207, May, doi: 10.1080/00909882.2012.654498.
- [17] Murray S.R., and Peyrefitte J., (2007) *Knowledge Type and Communication Media Choice in the Knowledge Transfer Process*, *Journal of Managerial Issues: JMI*, vol. 19, no. 1, pp. 111–133.
- [18] People.cn, (2021) *2020 Annual report of the impact of Chinese government Sina Weibo accounts [Online]*. Available: <http://download.people.com.cn/yingqing/eleven16115670881.pdf>.

- [19] MASTROFSKI S.D., SNIPES J.B., and SUPINA A.E., (1996) *Compliance on Demand: The Public's Response to Specific Police Requests*, *J. Res. Crime & Delinquency*, vol. 33, no. 3, pp. 269–305.
- [20] Bargain O., and Aminjonov U., (2020) *Trust and compliance to public health policies in times of COVID-19*, *J Public Econ*, vol. 192, pp. 104316, doi: 10.1016/j.jpubeco.2020.104316.
- [21] *Two Years and Thousands of Voices: What Community-Generated Data Tells Us About Anti-AAPI Hate*, *Stop AAPI Hate*, Jul. 2022. [Online]. Available: <https://stopaapihate.org/wp-content/uploads/2022/07/Stop-AAPI-Hate-Year-2-Report.pdf>.
- [22] Levin B., Perst K., Venolia A., and Levin G. (2022) *Report to the Nation: 2020s – Dawn of a Decade of Rising Hate*, *Center for the Study of Hate and Extremism*. [Online]. Available: <https://www.csusb.edu/sites/default/files/2022-08/Report%20To%20The%20Nation8-4-22.pdf>.