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an Empirical Study on the Impact of Government Microblogs on Online Engagements during the Covid-19 Outbreak

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1. INTRODUCTION AND RESEARCH QUESTIONS

As many public departments continue to promote the development of new media in government affairs, the government social media is taking a more prominent role in especially situations of emergency. The covid-19 outbreak in late 2019 was a public health emergency. With it ravaging the world in the era of data explosion, the public demand for trustworthy information continues to increase. And government microblogs serve exactly as a key channel for government information dissemination and are crucial in maintaining social stability, or the untimely or inappropriate disclosure of government information can make the public prone to irrational behavior, resulting in even secondary damage on social order [1]. Yet, researchers have found that online participation towards government release help mitigate public losses. [2] Therefore, engagement is a variable of great importance to measure the effect of government release in the context of crisis.

During pandemic, what kind of information was released by the government? what kind of information did citizens need from government? and whether the two have reached a perfect match? These three questions urgently need to be answered, but have not yet been studied enough in the research field. For the first one, while clustering and other scientific way of extracting content feature have been widely used in studies of public opinion, no study has yet applied these methods to extract topic features of government microblogs in epidemic scenarios, and are limited to methods of case studies and subjective pre-defined topic classification. For the second question, many studies use questionnaires to obtain what information people need subjectively, while few studies give answers based on existed data. In fact, as discussed above, online engagement is not only a variable worth studying for better social welfare, but also a variable that can measure the extent of people's information needs on certain topics in a crisis according to the cognitive-emotion-behavior model [3]. However, studies on the influence of government microblog on participation often only focus on the influence of limited features, such as microblog account characteristics, without a comprehensive and systematic framework.

Therefore, this study conducts a macro-level analysis of the relationship between content topic of government release during Covid-19 and online engagement to answer three main questions: (1) Based on amass data on Weibo, what content topics did the government release focus on during the covid-19 outbreak? (2) With 5W framework, whether and how does governmental release topics affect online engagement? (3) What insights can be extracted for government management?

2. THEORY AND RESEARCH FRAMEWORK

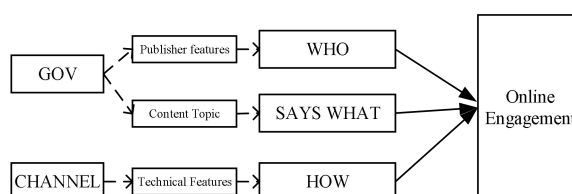


Figure 1. 5W framework

Based on the 5W framework proposed by Lasswell and its further extension in government management by Zhang, and with the help of theory of ELM, of risk perception and of cognitive-behavior, we proposed two main hypothesis: H1: There is a significant difference in people's engagement between different topics of governmental releases during the

covid-19 outbreak; H2: Central government accounts get more public engagement than local accounts. With Liu's suggestion, we selected representative samples and data during Jan. to Feb. from The 2020 Annual Government Microblog Influence Report using python and hypotheses are tested through negative binomial regression model.

3. RESULTS AND MAJOR FINDINGS

Three of the most important findings are: (1) Based on amass representative data and LDA method, we extracted for the first time the 9 main concerns of China's government release during epidemic, among which, themes of epidemic science and uplifting spirits occupy a much higher proportion, however, receiving less public attention. (2) Releases on "police and people interaction" and "important instructions" attracts most of public's attention, which can be explained, by cognitive-behavior model, indicating these two releases are most relevant to their needs, help ease anxiety in face of danger [4], and thus maintain social security through debates over cases and concerns of instructions. (3) Central government accounts get significantly more public engagement than local accounts, and this finding is in line with the theoretical expectation of this paper- information disclosure demand preference theory[5], that is, the public will treat the information disclosure from different levels differently, and relevant information released by the central government highlights the severity of the crisis and prompts the public to pay more attention to the sudden crisis, thus promoting political participation.

4. CONTRIBUTIONS

The study not only help clarify the real pattern of government release during pandemic in China but helps to identify what content topics raised the most public attention and discussion, which help offer further suggestion on government management on social media during Covid-19 outbreak. On the one hand, operations of government releases should consider to reduce the number of releases on the most posted two topics and instead to improve the quality on related content. On the other hand, the important role of "police and public interaction" and "important instructions" should be more affirmed so as to make better use of public resources. The discovery of public engagement significantly more on central accounts further complements the theory of Information Demand Preference and further expands the application of the Lasswell model in the context of information release during crisis. In addition, we only measures engagement at the level of likes and comments, and future research can target deeper connotations of engagement and content to provide more specific suggestions.

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REFERENCES

1. Lu, A., Yidan W.: A Diagnostic Model for the Maturity of Public Opinion Guidance Capability of Government Microblogs in the Context of Emergencies. *Information Studies: Theory & Application* 45(5), 133-141 (2022). in Chinese
2. Chatfield, A. T., Scholl, H. J., Brajawidagda, U.: Tsunami Early Warnings via Twitter in Government: Net-savvy Citizen's Co-production of Time-critical Public Information Services. *Government Information Quarterly* 30(4), 377-386 (2013).
3. Le H. T., Nguyen D. N., Beydoun A. S.: Demand for Health Information on COVID-19 among Vietnamese. *International Journal of Environmental Research and Public Health*, 17(12), 4377(2020).
4. Liu B., Lin S., Wang Q.: Can local governments' disclosure of pandemic information decrease residents' panic when facing COVID-19 in China? *International Public Management Journal*. 24(2), 203-221(2020).in Chinese
5. Chongbin H., Tianguang M.: Government information disclosure and crisis response in sudden public crisis. *E-Government*, 6,63-74(2022). in Chinese