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Public online opinion and the handling of crisis communication concerning COVID-19 news reports: Taiwan as an example

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Abstract

Online news often uses “netizen opinions” as material, which magnifies the spread of public sentiment online and may pose a threat for government organizations, especially with the media reporting on public opinion online these days due to how said opinions could become potentially dangerous topics in the news. This study focuses on the members of the Kaohsiung City Government’s Crisis Core Team, and how they handled crisis risk assessment when faced with a crisis that spawned from news reports of crisis during the fight against COVID-19. Using the 24,698 sets of data the Kaohsiung City Government gathered during its research period, we came up with 30 threatening news topics and asked a team of seven - five from the government and two journalists - to conduct risk assessment. Results of our research show that, in high-risk public health safety incidents, risk levels are firmly connected to the people’s understanding of whether the issue concerns the “self”.

Keywords: Social Network Site, Internet Public Opinion, Crisis Communication, COVID-19.

1. Introduction

The major public health emergency that is the COVID-19 outbreak has caused a ripple of instability and fear throughout the world, putting travel, tourism and related industries on hiatus, as every country races to do its best in containing the virus. People have become fearful due to a lack of familiarity and understanding of the virus and its deadliness, and as is natural from being in a highly stressful situation, then turn to information to calm their anxious thoughts. The search for public opinion online has caused anxiety to increase drastically in people, resulting in a negative impact on society from public opinion online.

Aiming to keep COVID-19 at bay, quarantine policies and working from home have caused people to turn to social media as their main platform to look for information or express their

opinions. Since 2020, many discussions about COVID-19 have been found on major social media sites like microblogs, Twitter, Facebook, and TikTok, containing information both true and false. When users bump into these nuggets online, the risk of internet rumors increases.

Without appropriate management, response and effective guidance, multiparty opinion spaces can give way to opinionated attacks that develop into online rumors, which then accumulate and become a gigantic crisis that are not to be underestimated. Such a situation could bring about threats, fear, and confusion, creating a pandemic within a pandemic, and cause serious damage to public safety and social stability; and if not handled well, it could also damage the government's image and even threaten its authority.

Online public opinions surrounding public health emergencies often spring up when the situation is yet to be resolved – when people can become involved simultaneously as the situation changes and develops. Hence, psychological elements cause internet opinion to demonstrate three characteristics: 1. There is more attention, 2. Extremely irrational emotions are running high, and 3. The possibilities and risks of rumors taking shape are higher because of the two former points, thus increasing the appearance of irrational voices in online discussions. This is the foundation for negative opinions online, and has brought challenges for organizations attempting to adopt a crisis communication strategy (Liu et al., 2022).

Dangerous public health emergencies rile more public opinion online than an ordinary incident. This makes it more difficult for government organizations – how they can take control with crisis communication strategies, bring the crisis to an end, reduce the negative impacts online, and restore credibility becomes an important hurdle to clear.

2. Literature review

2.1 Internet public opinion

Public opinion is the people's collective attitude regarding government offices or a nation's administration and their policies. It can be an emotional reaction towards any specific hot topic, and is a way the public expresses its feelings. While public opinion is built on top of the foundation that is the real world, opinions online live in a virtual world. Internet public opinion is a complex process in which many parties are participants, including four major stakeholders: the government, the media, users, and non-governmental organizations.

Huang (2020) identifies three characteristics of internet public opinion: 1. Virtual: as posts are not constrained by the limits of time and space, there are many internet platforms to express one's opinion at the same time and have it spread rapidly; netizens are thus able to seek validation from one another or thoroughly express their opinions, meaning that there are little to no limits on freedom of content. 2. Anonymous: As people are able to hide their true identities, including their names and personal information (known as "de-identification"), their rights of speech are equal. This allows them to speak their minds without much consideration or holding back, making internet public opinion extensive, diverse, and rich. 3. Diversification: as participants in a virtual space are not constrained by the limits of location and time, there may be a large number of people expressing their observations on a specific issue from "different

perspectives” at the same time. This means that public opinion online is not single-minded and one-directional; instead, it is conversations that are shaped by diversity.

Wang and Qi (2010) instead find four traits in internet public opinion: Publicity, openness, anonymity, and weakening. Public opinion online reflects what people are interested in at the time, including key issues like the “most searched keywords” found in online search engines (Zhang et al., 2020). Internet public opinion is people’s perspectives on public health emergencies, but in reality it is also a double-edged sword, as public opinion online may become a source of pressure for the government, and can be regarded as a “crisis”. Especially as false information and cyber warriors are ever-present in the virtual world of the internet, they may cause even more confusion for the decision-makers and put a crunch on their time to think and react, and further preventing them from coming up with the right and reasonable strategies. If the information is one-sided, lacks authenticity or integrity, and even complicates the execution of strategies, this ups the threat for decision makers.

Mei et al. (2019) propose a different way in which public opinion online is shaped. When an emergency happens, the internet is a means for information to spread rapidly; hence, the emergency shapes opinion online and the internet is the cause by which opinions become widespread. At the same time, because there is information asymmetry, users are unable to quickly grasp the whole picture of the emergency, and are often affected by personal biases, education levels, information sources, etc., when they are processing the meaning of the incident. This subsequently leads to reactions and attitudes that differ, with positive, negative and neutral stances, and these attitudes later are communicating around the world to become online global public internet opinion. Mainstream perspectives will influence a government’s decisions and judgment, which in turn affects its own credibility. Inappropriate responses, reported through the media’s coverage, will result in a negative influence on the public environment and the stability of the socio-ecosystem, so the categorization and management of different opinion risk levels is a key step.

Yang (2013) points out how media reports cite “netizen opinions” frequently, with many hot topics online becoming news material. When the researcher is a journalist reporting on the internet, news material can be scoured from the Facebook accounts of celebrities, Facebook groups like Baoliao Commune, bulletin board systems and even popular discussions in LINE groups. Yang (2013) and Liu (2013) both mention in their respective studies that in Taiwan, one can often see netizens’ opinions being blown out of proportion and being reported as news, even going so far as to quote “netizen opinion” in headlines or news tickers, with these methods becoming specific political rhetoric (Lin, 2013). Online public opinion is strengthened after it becomes news reports, and thus gains power after becoming a threat.

2.2 The concept of online public opinion risk levels

Regarding why public opinion risk management is necessary, Mei et al. (2019) believe that there are four requirements for organizations or administrators: 1. The risk management for online public opinion is helpful when it comes to dealing with emergencies, as the manner the opinions evolve in reflects the emergency itself. 2. Internet public opinion has considerable

influence over public emergencies, judiciary verdicts, and government decisions. 3. The openness, immediacy, and unlimited participation raises the risk of distorting information and turning it into online opinion, and may even cause rumors to spread, causing panic to ripple into the community and shake up society. 4. Managing the risk of online public opinion can help fight the negative impact brought by emergencies.

Liu, Tu & Zhou (2022) propose the concept model of risks posed by online public opinions (Figure 1). After a public health emergency occurs, aside from single-layered analysis of opinions, another analysis should be conducted after the emergency develops or if there is an update of important information. This is the most crucial part of online public opinion categorization. The categorization of internet public opinion risks includes detecting public opinion, categorization, and management; it is mainly to analyze the public opinions online and work out how to manage them. In the early stages of a public health emergency, online opinions will be influenced by the scale and type of the incident, as well as how fast the government has responded; in order to understand the levels of risk contained within, it is necessary to conduct a systematic analysis.

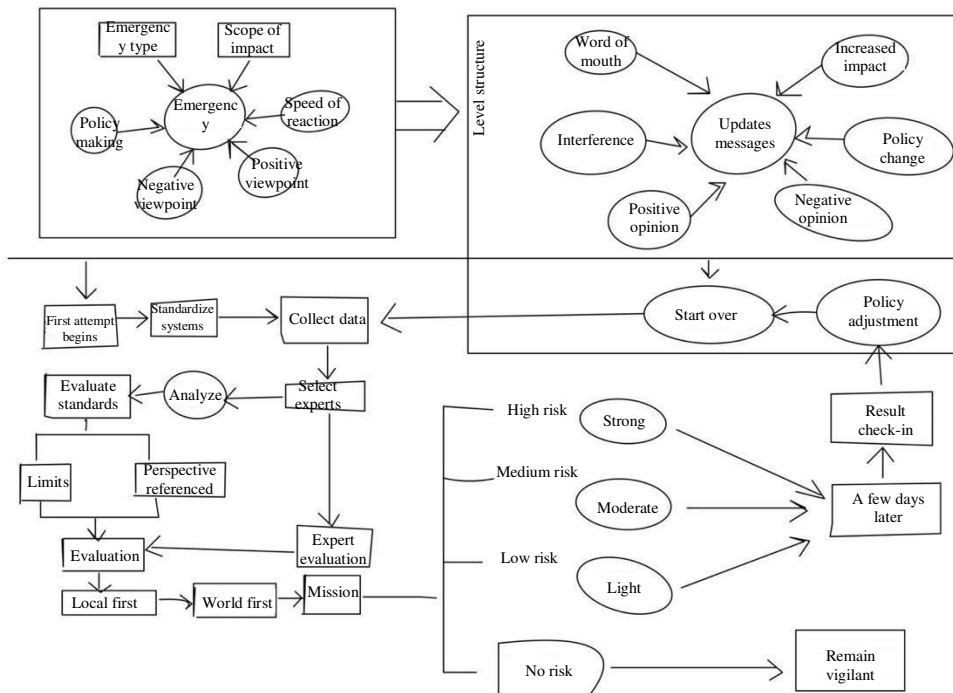


Figure 1. Concept model of online public opinion risk levels

Source: Liu, Tu & Zhou (2022)

The many steps to analyzing online opinions by categorized structural means mean one can continue monitoring and evaluating the opinions found on online platforms, and how they develop over time and the levels of risk they pose. This allows governments to take timely measures to reduce negative impacts. Compared to the first analysis of public opinion, the focus

in the multi-step process is to scale back on expert opinion in order to establish standards, which allows for shorter evaluation periods and increases the possibility of efficient and immediate responses. Risk levels are categorized into high, moderate, low, and no risk, with corresponding strengths of strong, moderate, slight and no impact. After implementing the risk level strategy, the government organization needs to continue observing any changes and the direction they take, and whether the negative voices online have been efficiently contained. Even if the risk level evaluation points to “no impact,” the situation should be monitored further, because public opinions online are fluid and change often – they never remain stagnant.

3. Method

Hertz & Imber (1993) believe that not many social researchers study the elites, as elites are prone to construct barricades that fence themselves off from other members of society, especially elites of authority. Aside from facing heavy work regularly, they are relatively sensitive in handling things, and are rather impossible to study with the quantitative surveys used in social sciences (Neuman, 2000). Due to the reasons mentioned above, this study employs quantitative, in-depth interviews to collect the thoughts and logic well-hidden in the minds of the elite (Luo, 2002). As shown in Table 1, this study interviewed seven members of the Kaohsiung City Government’s Crisis Core Team, to better understand the risks in news reports and evaluation standards.

Table 1. The in-depth interview participants

No.	Background	Surname	Experience
A	Core decision maker	Chen	3 years
B	Assistant decision maker	Kao	11 years
C	Assistant decision maker	Pan	19 years
D	Team of experts/public health expert	Lin	30 years
E	Team of experts/public health expert	Tsai	25 years
F	Senior health and medicine journalist	Hsu ¹	20 years
G	Medicine and drug journalist	Hsu ¹	6 years

Data was collected for this study between May 15, 2021 and April 30, 2022. The keywords that public opinion monitors searched for in news headlines and reports included “Kaohsiung”, “COVID-19”, “alert” and “COVID containment”, targeting these publications: UDN Group, SET TV, *ETtoday*, *Apple Daily*, *CNA*, *China Times* and the *Liberty Times*. They came up with 24,698 search results, with details shown in Table 2:

Table 2. News reports and online opinions collected internally by Kaohsiung City Government

Search period	Number of online news stories
2021/05/15-2021/05/25	2,000
2021/05/25-2021/06/06	2,000
2021/06/06-2021/06/22	2,000
2021/06/22-2021/07/08	2,000
2021/07/08-2021/07/27	2,000
2021/07/27-2021/08/27	2,000
2021/08/27-2021/10/10	2,000
2021/10/10-2021/12/23	2,000
2021/12/23-2021/12/31	251
2022/01/01-2022/01/26	2,000
2022/01/26-2022/02/14	2,000
2022/02/14-2022/03/30	2,000
2022/03/30-2021/04/24	2,000
2022/04/24-2022/04/30	447
Total	24,698

4. Result

In line with the 24,698 news story results that came up for the Kaohsiung City Government's team, this study follows Lerbinger (1997) in defining crises as "major issues that occur suddenly"; the severity of the issue can be decided based on the report's location in a newspaper layout, the size of the story, and the amount of coverage. However, unlike print newspapers, there are no "layouts" or "sizing" when it comes to online news stories. For this reason, this study collected public opinions online and roughly analyzed the news opinion crisis that the Kaohsiung City Government encountered, categorized by the number of news reports and how long the coverage went on. We then listed the top three news topics by month, and another 30 risk-related news topics by coverage. The seven interviewees then evaluated the 30 topics for risk, with the results presented in Table 3.

Table 3. Risk levels of news topics as determined by the interviewees

Topics		Number of risk-related news topics as tallied by interviewees			
		Strong	Moderate	Light	None
1	Police inspecting people not wearing masks	6	1	0	0
2	Cluster infections at En-Chu- Kong Hospital	5	2	0	0
3	Issue of rapid-test centers	3	4	0	0
4	Cluster infections at Kaohsiung Harbor	7	0	0	0

5	The invasion of the Delta variant	5	0	2	0
6	African swine flu	0	3	4	0
7	Mahjong cluster infections	4	1	2	0
8	Cluster infections at quarries	4	2	1	0
9	Operation issues of the Ruifeng Night Market	2	3	2	0
10	Controversy over stall operators becoming infection sources	1	3	2	1
11	Vaccination issues for Taiwan High Speed Rail employees	3	0	4	0
12	Vaccination in schools	3	1	3	0
13	Cluster infections at Mudanwan Villa	1	3	1	2
14	Cluster infections at chemical plants	2	2	3	0
15	Protective barriers for dining-in	2	4	1	0
16	Lifting the mask mandate	1	3	3	0
17	COVID measures for the National Day fireworks event	0	5	2	0
18	Large gatherings at recreational spaces	4	2	1	0
19	Drug parties held at 85 Sky Tower	1	2	3	1
20	Infections in quarantine hotels	4	3	0	0
21	Inspection of bistros	2	1	4	0
22	Reopening of adult entertainment industry	2	3	2	0
23	Preventing the invasion of the Omicron variant	0	5	2	0
24	Inspection of recreational spaces	1	2	4	0
25	Allowing adult entertainment industry to resume operations	1	3	3	0
26	Gathering issues for group tourism	0	5	2	0
27	COVID prevention during the Lantern Festival	0	5	2	0
28	Difficulties for at-home quarantine/isolation after arriving from overseas	1	1	5	0
29	Police officers coming in contact with confirmed cases	1	2	4	0
30	Patients in isolation dying before reaching hospital	2	1	4	0

Among the 30 risk-related news topics, each is considered proven to be risk-related and used as a reference if four or more interviewees agree that it falls within the same level of risk.

Of the issues that the interviewees have agreed on, there were seven that more than four members believe to be high-risk: The Kaohsiung harbor clusters; the police inspecting those not wearing masks; the cluster infections at Chu Kong Hospital; the invasion of the Delta variant; the

infection in quarantine hotels; mahjong cluster infections and the quarries' cluster infections. The moderate risk-level incidents are: Rapid test centers; the use of protective barriers when dining in; COVID-prevention at the National Day fireworks event; preventing the Omicron variant invasion; gathering issues for group tourism and COVID prevention during the lantern festival. Low risk news topics included: African swine flu; vaccination for Taiwan High Speed Rail employees; inspection on bistros and recreational spaces; difficulties for at-home quarantine/isolation after arriving from overseas; police officers coming in contact with confirmed cases; and patients in isolation dying before reaching the hospital. While there were no topics that more than four interviewees were able to agree on as risk-free, the topic that came closest was the Mudanwan Villa cluster infections, with two votes.

Stall operators becoming infection sources and the drug parties held in the 85 Sky Tower each received one vote for "no risk". No topic received a majority of evaluations as being of no risk. Thus, we can consider all 30 to pose at least a certain degree of risk.

5. Conclusions

For the team's core decision makers and journalists, the number of news reports are not the sole factor for an issue to become high-risk. For example, "cluster infections at Kaohsiung Harbor" was only ranked as number 4, but for the core decision makers and the journalists, it was a unanimous vote for "high-risk" and the only news topic to receive all seven votes of agreement. This unanimous assessment bumped down "Police inspecting people not wearing masks" and "Cluster infections at En-Chu-Kong Hospital", both of which had the most news coverage. And while "the invasion of the Delta variant" was only ranked at number 20 and therefore fell near the bottom of the list, it also received five votes from the interviewees, to qualify for high risk. In conclusion, in major public health emergencies, the analysis of risk-related news topics indicate that the level of risk is closely correlated to how the public perceives the incident and its connection to the "self".

REFERENCES

1. Hertz, R., & Imber, J. B. (1993). Fieldwork in elite settings: Introduction. *Journal of contemporary ethnography*, 22(1), 3-6.
2. Huang, B. (2020). Analyze the Influence of Internet Public Opinion on Public Policy. *Open Access Library Journal*, 7(8).
3. Lerbinger, O. (1997). The crisis manager: Facing risk and responsibility (book review). *Journalism and Mass Communication Quarterly*, 74(3), 646.
4. Lin, C. C. (2013). Exploring TV News Coverage of Disaster: A Case Study of Typhoon Morakot. *Mass Communication Research*, Vol. 115, 141-185.
5. Liu, H. W. (2013). Net-users as news source: The true order of TV news production in the digital era. *Journal of Audio-visual Media and Technologies*, Vol. 36, 37-68.

6. Liu, J., Liu, L., Tu, Y., Li, S., & Li, Z. (2022). Multi-stage Internet public opinion risk grading analysis of public health emergencies: An empirical study on Microblog in COVID-19. *Information Processing & Management*, 59(1), 102796.
7. Liu, L., Tu, Y., & Zhou, X. (2022). How local outbreak of COVID-19 affects the risk of internet public opinion: A Chinese social media case study. *Technology in Society*, 71, 102113.
8. Lo, K. J. (2002). The study of integrated marketing and communications as applied in political party campaigns - A case study of the Kuomintang in the 2001 Legislator Elections. Master's thesis for the Shih Hsin University's Graduate School of Communications.
9. Mei, Y., Tu, Y., Xie, K., Ye, Y., & Shen, W. (2019). Internet public opinion risk grading under emergency event based on AHP sort II-DEMATEL. *Sustainability*, 11(16), 4440.
10. Neuman, M. (2000). Communicate this! Does consensus lead to advocacy and pluralism?. *Journal of planning education and research*, 19(4), 343-350.
11. Wang, L. & Qi, G. (2010). The risk management of public opinion online and the credibility of public policies. *Journal of Fujian Administration Institute*, 4.
12. Yang, Y. J. (2013). News Presentation of Internet Opinion and Public Imagination: Content and Discourse Analysis of "Net-User Says" News. *Chinese Journal of Communication Research*, Vol. 24, 119-164.
13. Zhang, Q., Cao, J., Song, T., & Du Haidong, Z. C. (2020). Cascading Failure Analysis of Equipment Support Network Based on SIRV Virus Propagation Theory. *Journal of System Simulation*, 32(10), 1847.