

## Retraction

# Retracted: Public Opinion Guidance and Communication Mechanism Innovation of Public Health Events Based on the Multitask Learning Network in the Internet Era

## **Mobile Information Systems**

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation. The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

#### References

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## Research Article

# Public Opinion Guidance and Communication Mechanism Innovation of Public Health Events Based on the Multitask Learning Network in the Internet Era

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In order to improve the public opinion guidance ability for public health events in the Internet era, and improve the the problems of the traditional public opinion guidance mechanism, we analyze the public opinion guidance and communication mechanism based on the Internet era, and analyze the guidance software and software system, and related technical requirements? subsequently, the efficiency analysis of the public opinion guidance and communication mechanism of the multitask learning network was conducted; the results show that the public opinion guidance and communication mechanism of public health events based on the multitask learning network can effectively improve the diagnostic and early warning ability and diagnostic accuracy of the public opinion fermentation in public health emergencies, reduce the difficulty of guiding the public opinion fermentation of public health emergencies, and effectively improve the success rate of guidance for such events. In the Internet era, the public opinion guidance and communication mechanism based on the multitask learning network has improved the public opinion guidance ability for public health events, and it provides a research direction for the development of the network public opinion guidance system for unconventional public health emergencies in the future.

## 1. Introduction

The control and integration of social information and the use of media to influence public opinion, guide people's will, and dominate people's thoughts and behaviors are all examples of public opinion guidance. Qian said that in recent years, China and the world have seen many extraordinary situations, including SARS in 2003, avian influenza in 2004, Anhui vaccine in 2005, H1N1 influenza in 2009, H7N9 influenza in 2013, West Africa Ebola virus in 2014, and COVID-19 in 2020 [1] which cause major harm to the people and have a significant impact on the normal operation of society. Sheng and Yan said that in times of crisis, we should rely more on public opinion to guide us: "major infectious diseases, unexplained epidemics, severe food and occupational poisoning, and other major public health

threats [2]." For example, the new coronavirus is the most widespread worldwide public health disaster since its establishment in People's Republic of China. "Novel coronavirus pneumonia" is an emergent public health event. Soqi (2021) analyzed the characteristics of public opinion. It was easy to prevent and control [3] when the public health events were occurring. Dan pointed out in the research that the further acceleration of Phe of new media communication will cause panic and increase the difficulty of POG. Taking the outbreak of COVID-19 as an example, the research discussed the focus of new media communication in the emergency department of sudden POG through the analysis of mainstream network reports [4]. Taking coronavirus 2019 disease as the research object, Haixing took Guizhou Daily as the research object, analyzed its publicity and report on COVID-19 epidemic situation, and discussed how the news

media should guide public opinion in public health emergencies [5]. Jiuliang took novel coronavirus pneumonia as an example and discussed the editorial strategy in the guidance of Internet public opinion in the era of mass media. As a result of sudden events involving highly sensitive and wide audience, it is very important to transmit and distribute information to the public quickly, accurately, and thoroughly [6]. The immediacy, interactivity, and ease of use of the Internet are increasingly evident in the dissemination, organization, and mobilization of emergencies. Liang said that, however, in the Internet era, scenes such as information overload and rumor breeding have exacerbated public panic, exacerbated the pressure of public opinion, and challenged the guidance of public opinion [7]. Therefore, in the same process of the rapid spread of social media and the masking of online public information, public health emergencies are more likely to cause adverse guidance of social public opinion, easily lead to social unrest and panic, and have a certain impact on social stability. Pan and Yishan said in the research on public opinion dissemination, guidance, and network information governance in public health emergencies that the authenticity of network public information helps people correctly understand emergencies, while false public opinion and network rumors will undermine order. It is necessary to pay attention to the new ideas and methods of network public opinion dissemination and guidance and network information governance when public health emergencies occur [8]. Hu Xiaohan (2019) analyzed the guidance of network public opinion in public health emergencies. In his research, he said that the arrival of the era of network self-media also makes the government's way of guiding public opinion need to be constantly updated and changed. It is necessary to find the reasons according to the characteristics of network public opinion in public health emergencies and the problems existing in the current government's guidance of public health and safety events, to deal with the public opinion countermeasures of sudden public health events under the development environment of new media.

China is currently undergoing a time of social upheaval, with imbalanced economic development, chaotic social order, people's imbalance, and a slew of social problems. We live in the Internet era, where everyone has a "microphone," and the information transmission environment has changed dramatically. Any unexpected public occurrences will be recorded, published, and shared by netizens, prompting widespread alarm among netizens. Pan said that the network and real society engage with each other as a result of the event's relationship, forming a competitive field of public opinion [8]. Public opinion on the Internet, like the Internet, is a "two-edged sword" that can help people interact and encourage the smooth progression of cases but can also provoke disagreements and even social unrest. Through a comparative analysis of 48 public emergencies between 2019 and 2021, it is easier for unconventional public emergencies to enhance the influence of online public opinion through the dissemination of online media, and the discussion and dissemination of events by netizens have also enhanced the influence of online public opinion on public emergencies [9]. Tao believes that there are many constructive views and propositions in online public opinion and it can have a positive impact on the government's decisionmaking and governance. However, the false dissemination of public opinion will also affect the direction of public opinion and affect the social stability [10]. As a result, proper emergency orientation is not only important for the incident's resolution but also for the existing society's harmonic and easy transition. Nan and Yang had told that public health events are marked by their visibility, danger, complexity, and persistence, as well as a high level of public awareness and demand for information [11]. Rapid response, interaction, flexibility, wide coverage, quick release, rolling broadcast, real-time interaction, and so on are all advantages of the Internet, which are inherently compatible with the characteristics of emergencies.

## 2. Problems and Causes Faced by the Traditional Public Opinion Guidance Mechanism of Public Health Events

#### 2.1. Problems Faced by the Traditional Public Opinion Guidance Mechanism of Public Health Events and the Public Opinion Communication Mechanism

2.1.1. Lack of Ideological Crisis Consciousness. The public opinion guidance mechanism of public health events will not pay enough attention to the hot issues on the network, ignoring the correct public guidance, unable to grasp the right time for theoretical guidance; finally, it is difficult to later handle the public health event, and we lose the initiative to solve the event. The rapid spread of information in today's society, especially the rise of the Internet, has made public health events completely exposed to the public. The relevant institutions of the public opinion guidance mechanism lack of understanding in the handling of public health events, which will undoubtedly increase the complexity of handling subsequent events, so that public opinion guidance is in a passive position.

2.1.2. Lack of Public Trust Appeal in Management. Gang thinks that the lack of public trust appeal of the relevant government departments or public media in their management makes it difficult to spread information effectively [12], accurately, and objectively when emergencies occur, which leads to a serious deviation of online public opinion from the actual situation. The main causes are two aspects:

(1) A few relevant personnel of the public opinion guidance mechanism of public health events hold the wrong view of power, making them unwilling to take the initiative to publish the relevant information in time and to communicate and interact with the public. At the same time, with the people's desire for the right to know and the right to supervise, it is urgent to obtain the latest and most objective information from the relevant government agencies, and the desire for information disclosure is increasing. This leads to the contradiction between the information disclosure of some government officials and the public's desire for information disclosure becoming seemingly irreconcilable, eventually leading to the flood of information in emergencies

(2) Before, the occurrence of many such emergencies and the handling process of public opinion guides showed the corruption, bribery, and inaction of some relevant officials to the world. At the same time, the relevant theoretical guidance was not in place or even wrong, to attempt to control the influence scope of the event. Many improper practices have led to the loss of the credibility of the relevant staff in public opinion guidance, seriously affected the public image of the government, and finally led to the flood of online public opinion

2.1.3. Passive Lag in Response. The disposal effect of public health incidents is closely related to the disposal measures of relevant departments of public opinion guidance. Wei said that if effective measures can be taken at the beginning of the event, it is possible to eliminate it in the bud [13].In practice, because of insufficient understanding of network and theory, does not adapt to the characteristics of the new era of the network, public opinion guide related departments relatively lag, unable to master disposal initiative, in emergency inertia thinking to avoid conflict, deliberately control events, but often backfire, lead to further expansion, If deliberately controlling the scope of the event, trying to reduce the event in disguise,-But often backfire, leading to further expansion, At this time,-Cut off the network, And it even to mobilize the police to deal with it illegally, eventually led to the outbreak of public health events. In the network era, we have put forward higher requirements for public opinion guidance departments to deal with public health events, take the initiative to guide the public opinion of public health incidents, timely publish accurate and objective event information, and clarify relevant facts. Only in this way, to win the initiative in dealing with public health emergencies, provide a guarantee for the reasonable and effective handling of the event, avoid the public panic caused by the flood of public opinion.

2.1.4. Lack of Online Public Opinion Research and Judgment. China's network public opinion analysis system has made some achievements: a considerable number of websites have established a preliminary public opinion analysis system, gradually assumed the role of the public opinion analysis system, and initially formed a crisis-warning platform nationwide. However, there are still some problems, especially reflected in the public opinion analysis, and early warning mechanism.

2.1.5. Insufficient Network Agenda Setting Capability. Li thinks that although the agenda setting of media and network cannot control the thoughts of netizens, it can have enough ability to guide public opinion to the direction it wants to guide [14]. Under the network environment, the diversification of setting issues itself, diversified issue setting subjects, and multichannel setting methods all make the issue setting more complicated. If effective measures cannot be taken for the many negative effects of the network and situation of emergencies and to give appropriate and correct guidance to

the online public opinion, it is bound to cause the flood of the online public opinion and cause serious consequences.

2.1.6. Analysis of Public Opinion Communication Mechanism. In view of the major public health emergencies, the analysis of the public opinion communication mechanism is mainly reflected in the three stages: the generation period, diffusion period, and elimination period, as shown in Figure 1:

2.2. Analysis of the Problems Faced by the Traditional Public Opinion Guidance Mechanism of Public Health Events. The current issues with online public opinion guidance in public emergencies are primarily due to issues with the guiding mechanism. There are a variety of causes for this, which include the following:

2.2.1. A Lack of Understanding of the Importance of Information Disclosure. Although public opinion on public health events in China has improved and significant adjustments have been made, there is still a significant disparity when compared to developed countries. This is mostly due to the fact that leaders at all levels have failed to recognize that information disclosure serves the people, not the other way around. For subjective reasons, some departments are hesitant to share information to the public. The majority of the data is good; negative data is not released.

2.2.2. Backward Network Technology. China is currently working hard to develop a public opinion early warning and monitoring system and has seen success in a number of areas, including network supervision, network emergencies, network public opinion, and other challenges, by employing a variety of effective filtering techniques. Our country's public opinion early warning and monitoring system is costly, and because of the long construction time and complexity of maintenance, it cannot be expanded to basic government departments.

2.2.3. The Legal System Is Ineffective. In recent years, China has placed a high value on the development of a rule-of-law society and has pledged to strengthen it. China, on the other hand, will take a long time to build a sound judicial system based on online public opinion.

2.2.4. A Vacancy for a "Gatekeeper" in the Network Media. In terms of "gatekeeping" and application, network media lag behind conventional media. The main cause of this situation is that the time spent using Internet information is too short, and a lack of experience, as well as extensive and unconstrained information sources, results in a large amount of data and rapid dissemination, making it impossible to conduct a thorough review of network information on time. Because of its slow propagation speed and long usage time, traditional media information has a relatively mature theory of "gatekeeping." Furthermore, most commercial websites exist to make money, and the most profitable profit source is click rate and audience rating, and because these public events are the center of public attention, they will use this method to make money. All of these factors make it more difficult to verify the Internet, and as a result, negative news and public opinion propagate.

Less information Contradiction The network environment The audience has strong demand for information Diffusion phase Generate the phase Lavers Major health The rumor to emergencies generate Layers Lavers Rumor monger push The spread The authorities refuted the rumor Layers Announce the truth Layers Lavers The spread Digestion period

FIGURE 1: Schematic diagram of the communication mechanism of public opinion. Lack of information, lack of information; major health emergencies, major infectious diseases, mass diseases of unknown cause, major food and occupational poisoning, and other major public health hazards; generate the phase, the period during which a rumor is generated; diffusion phase, the period during which a rumor spreads; digestion period, the period during which rumors dissipate until they disappear; the spread, to spread outwards.

## 3. Construction of Public Opinion Guidance and Communication Mechanism of Public Health Events Based on Multitask Learning Network

The system model based on network public opinion orientation is developed, and its business subsystem is analyzed from the direction of multitask learning network, which is commonly divided into seven stages from the process: (1) a thorough investigation and assessment of the network's public opinion hotspots, (2) establish a stronghold in online public opinion and prepare for the second battle, (3) create a variety of content and release strategies for the battlefield, (4) use a variety of network technologies to deliver and disseminate information, (5) expand your blossoming, strengthen your mutual identity, and find a new focus (6) use hot resonance to help you communicate more effectively, and (7) use the network to analyze the situation and determine the best course of action. The block diagram of the public health network public opinion war system is shown in Figure 2:

The online public opinion guidance software and hardware system for unconventional public health emergencies primarily consists of the following: (1) establish an online public opinion supervision system that includes analysis and prediction of public opinion hot spots, intelligence collection and sorting, tracking and monitoring terminal tasks, public opinion guidance and guidance, and learning and applying the law of public opinion. (2) The online opinion and information production system works with a variety of media and includes features such as rapid planning, automatic generation of useful

public opinion data, self-replication, and transplantation. (3) A large network information transmission system with efficient, hidden, convenient network public opinion communication function can hide in peacetime and wartime ambitions through firewall or registration restrictions. (4) Intelligent network investigation robot, which is an intelligent robot capable of searching the Internet for relevant information using keywords, obtaining hot topics, forming a clue, providing tracking, and carrying out precise strikes. (5) The public opinion event database, operation data center, and data and event analysis center in a distributed environment are all part of large network public opinion management software, which is a tool for big data operations. (6) Online opinion guidance effect evaluation software, a dynamic public opinion index evaluation system, is automatically collected by computer battlefield data, real-time generation, according to actual needs: excellent, good, average, poor, and very poor, to assist public opinion guidance.

## 4. Analysis of the Public Opinion Guidance Efficiency Based on the Multitask Learning Network

This part analyzes the public opinion guidance and communication mechanism of multitask learning network. First, the reference group and the observation group were set up, and then, the sensitivity and specificity of public health events, the early warning ability of public opinion, the difficulty of POG, and the success rate of POG were compared and analyzed.



Network public opinion guidance battlefield

FIGURE 2: Structural framework of rapid response system of public health network. Cyberspace, various platforms on the Internet are strange, but only a small number of them will become the birthplace, diffusion, and dissemination of public opinion; network public opinion guidance battlefield, as a battlefield guided by public opinion, network platforms must have certain conditions, including themes, concentration, traffic, guidance, and control, which can be divided into main battlefields and subtheaters according to control authority; network public opinion monitoring, collection and collation analyze and excavate online public opinion, grasp the law of event development, predict the situation, analyze public opinion, provide in-depth intelligence, and guide public opinion; network information shielding, the guiding goal of network public opinion includes network information itself, network columns and even the control of network platforms themselves, and the shielding of bad information; network public opinion information production, the use of speech synthesis technology and images/video splicing technology, multimedia camouflage technology, can produce speech, background, specific scenes and other forms, the formation of images, text, sound, image comprehensive application, so as to achieve the effect of false and real; large-scale network information delivery, the use of network transmission equipment, in accordance with the established blockade and encirclement strategy, a large number of network information, network public opinion warfare; network public opinion big data manager, for all kinds of centralized, distributed public opinion information platform, build a public opinion big data management system, timely collection of hot spot information, so as to track, early warning, accurate blocking; machine intelligent reconnaissance, according to the public's hot topics, set intelligent robots, search for hot topics and events on the Internet, just like sentries, react in advance, report to the combat unit; public opinion guidance coordination command post, according to the public's hot topics, set up intelligent robots, search for hot topics and events on the Internet, just like sentries, react in advance, report to combat units; network public opinion guidance effectiveness evaluator, through the automatic collection of public opinion situation, the analysis of traffic, focus, direction, the impact of network public opinion warfare, improve decision-making, provide support for the next step of strategic strategy.

In order to verify the role of the public health event public opinion guidance and communication mechanism based on the multitask learning network in the public opinion guidance,  $R^2$  values were obtained using the linear regression method under SPSS, and t and P values were obtained using bivariate t-calibration. The  $R^2$  values were counted as the ratio of the regression to the mean residues, as described in formula (1):

$$R^{2} = \frac{\sum_{i} (x_{i} - \bar{x})}{\sum_{i} (x_{i} - \bar{x}_{i})}, \ \bar{x} = \frac{1}{n} \sum_{i=1}^{n} x_{i},$$
(1)

where  $\bar{x}$  investigates the average value of the sample sequence calculation;  $\tilde{x_i}$  is the *i*-th regression value in the sequence;  $x_i$  is the *i*-th input value in the sequence; and *n* examines the number of samples.

The *t* test, also called the Student's *t* test, is a *t*-distribution theory to infer the probability of the difference occurring, so as to compare whether the difference between the two averages is significant. It is mainly suitable for a normal distribution with a small sample size and an unknown overall standard deviation. The *t* value comes from the Value value of the comparison results, considering the two columns when *t* < 10.000, and the smaller the *t* value, the *P* value is from the Log value, statistical reliability when *P* < 0.05 and significant when *P* < 0.01.

The *t* value and *P* value of bivariate *t*-check come from the bivariate *t*-check process, where the *t* value is the Value value of the output result. When t > 10.000, the value of the t. 000, the *P* value is considered within the confidence space, and when P < 0.05, the result data has significant statistical significance. The smaller the *P* value, the higher the confidence degree. Subject to length, only the *t* value (Value value) is explained here, such as formula (2):

$$t_{\text{Value}} = \frac{\bar{\mathbf{x}} - \mu}{\sigma_x / \sqrt{n-1}}, \, \bar{\mathbf{x}}, \, \mu = \frac{1}{n, m} \sum_{i=1}^{n, m} x_i, \, \sigma_x = \frac{1}{n-1} \sqrt{\sum_{i=1}^n (x_i - \bar{\mathbf{x}})^2}, \quad (2)$$

where  $\bar{x}$  investigates the average value of the sample sequence calculation;  $\mu$  is the mean value of the sample sequence used by reference; *n* is the mean value of the sample sequence used by reference; *m* is the number of nodes of the reference sample sequence; and  $\sigma_x$  investigates the standard deviation rate of the sample sequences.

This paper selects the traditional public opinion guidance and communication mechanism of public health events as the reference group and the multitask learning mechanism based on the public health event learning network constructed in this paper as the observation group. The public opinion sensitivity of traditional public health events mostly depends on the human search of website managers and other relevant staff, while the public opinion guidance and communication mechanism of public health events based on multitask learning network is based on the system using wide spatial convolutional neural network and fuzzy convolutional neural network.

4.1. Find the Specificity and Sensitivity of Public Opinion in Public Health Emergencies. By comparing the sensitivity and specificity and early warning ratio of public health events between the observation group and the reference group, we can effectively master the diagnosis and early warning ability of the public opinion guidance and transmission mechanism of public health events based on the possible public health events. The detailed data are shown in Table 1:

From Table 1, the observation group has a higher specificity and sensitivity than the reference group. In the comparative evaluation results, t < 10.000 and P < 0.05 show that the public opinion guidance and communication mechanism compared with the traditional public health events has statistical differences in sensitivity and statistical significance and that the guidance and communication mechanism of public health events can effectively improve the diagnostic early warning ability and diagnosis accuracy of public health emergency fermentation, so that the public opinion guides can find the possibility of public opinion fermentation earlier and timely solve before the event is fermented.

By comparing the difficulty of public opinion guidance and the success rate of public health guidance between the observation group and the reference group, we can effectively master the public health events based on the multitask learning network (for public opinion guidance and communication mechanism and the guidance efficiency and diffi-

TABLE 1: Special and sensitivity of public opinion guidance and dissemination mechanism of public health events (data source: specific statistics).

Groups	Specificity (%)	Sensitivity (%)	Warning ratio (%)
Anchoring group	85.3	88.8	96.9
Observation group	98.7	97.7	99.5
t	3.308	3.227	8.667
Р	0.007	0.008	0.006

Specificity, proportion of true negative data in negative data; sensitivity, proportion of true positive data in positive data in the results; warning ratio, number of early warning accounts for the number of early warning required.

TABLE 2: The efficiency and difficulty of the public opinion guidance and communication mechanism in guiding public health events (data source: specific statistics).

Groups	Difficulty of guiding $(R^2)$	Guiding efficiency $(R^2)$
Anchoring group	0.991	0.756
Observation group	0.753	0.983
t	6.511	6.288
Р	0.006	0.006

Difficulty of guiding, the difficulty of guiding the public opinion of the fermented public health events; guiding efficiency, the ratio of the public opinion of successfully guiding the fermented public health events to all the fermented public health events.

culty of public opinion fermentation for possible public health events, see Table 2 for detailed data display).

As shown in Figure 3, the specificity and sensitivity of the observed group were higher than the reference group. Public opinion guidance and communication mechanism and the traditional public health event statistical differences in sensitivity and statistical significance, public health event guidance, and communication mechanism can effectively improve the public health emergency fermentation diagnosis early warning ability and diagnostic accuracy, make the public opinion guide before event fermentation earlier, and timely solve the possibility of public opinion fermentation. By comparing the difficulty of public opinion guidance and the success rate of public health guidance between the observation and reference groups, we can effectively grasp the public health events based on the multitask learning network. For the possible public health events, the efficiency and difficulty of public opinion guidance and communication mechanism, and the guidance and the efficiency of public opinion fermentation, the detailed data are shown in Table 2.

The difficulty of guiding public opinion in fermented public health events, the guiding efficiency, and the ratio of guiding public opinion in successfully fermented public health events to all fermented public health events are shown in Figure 4. The observation group is less difficult and more



FIGURE 3: Special and sensitivity of public opinion guidance and dissemination mechanism of public health events. Specificity, proportion of true negative data in negative data; sensitivity, proportion of true positive data in positive data in the results; warning ratio, number of early warning accounts for the number of early warning required.



FIGURE 4: The efficiency and difficulty of the public opinion guidance and communication mechanism in guiding public health events. Difficulty of guiding, the difficulty of guiding the public opinion of the fermented public health events; guiding efficiency, the ratio of the public opinion of successfully guiding the fermented public health events to all the fermented public health events.

efficient in the public opinion guidance than the reference group. Compared in the results of public health events, public opinion guidance and communication mechanism in the traditional public health events public opinion guidance difficulty and public guidance efficiency, based on multitask learning network public opinion guidance and communication mechanism, can effectively reduce the difficulty of guide the public health emergency public opinion fermentation, effectively improve the guidance success rate, simplify the public opinion guidance work, and make the public opinion guidance more simple and feasible.

As can be seen from Table 2, the observation group has lower guidance difficulty and higher public opinion guidance efficiency than the reference group. In the results of the comparative assessment, t < 10.000 and P < 0.05. It shows that the public opinion guidance and communication mechanism of public health events is significantly different in terms of public opinion guidance difficulty and public guidance efficiency of traditional public health events. It shows that the public opinion guidance and communication mechanism based on the multitask learning network can effectively reduce the difficulty of guiding the public opinion fermentation for public health emergencies and effectively improve the guidance success rate for such events, thus simplifying the work of public opinion guidance, making the guidance of public opinion more simple and feasible.

#### 5. Summary

This paper first presents a detailed analysis of the problems facing the existing POG mechanisms, and then, the POG and communication mechanism of PHE based on multitask learning network in the Internet era, the sensitivity and specificity of public health events, public opinion early warning ability, POG difficulty, and success rate of POG were compared and analyzed. The results show that the POG and communication mechanism of PHE based on MLN can effectively improve the diagnosis, early warning ability, and diagnostic accuracy of the public opinion fermentation of sudden PHE, reduce the difficulty of guiding the fermentation of sudden PHE public opinion, and effectively improve the success rate of POG of such events. It provides a research direction for the future development of unconventional burst PHE network POG system.

### **Data Availability**

The data underlying the results presented in the study are available within the manuscript.

#### Disclosure

We confirm that the content of the manuscript has not been published or submitted for publication elsewhere.

#### **Conflicts of Interest**

There is no potential conflict of interest in our paper.

#### **Authors' Contributions**

All authors have seen the manuscript and approved to submit to your journal.

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