

Research on coVID-19 Public Opinion Guidance Strategies based on Social Media

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Abstract

Objective: To study effective public Opinion guidance Strategies for COVID-19 To help create a good public opinion atmosphere To combat the epidemic. **Methods:** Between January 2020 and May comments under the "People's Daily," the Official blog of data as the Basis, Combining with the status quo at home and abroad, The status quo analysis was carried out on the outbreak of the New Champions League Public Opinion, and text Mining, LDA Subject to review data Modeling analysis, On the basis of emotion classification to further explore the influence factors of positive and negative emotions. The public paid more attention to The information of epidemic prevention and control, Resumption of work and prevention and control measures. The factors influencing people 's positive emotions include The advanced typical, of fighting against The epidemic and The firm faith in Defeating the epidemic. The negative emotions of the public are affected by the severe situation of the epidemic, the delay in returning to work and school, And the impact of entry and exit on an epidemic prevention and control. **Conclusion:** Suggestions and puts forward from three aspects: "Authoritative information report is timely and effective", "temperature" publicity stimulates positive energy "and" innovative publicity strengthens the public opinion guidance ".

Keywords

COVID - 19; The popular feelings. Text mining; LDA.

1. Introduction

With the rapid development of computer network science and social network, social media has become the main communication platform for emergencies. Covid-19 is the most widely affected public health emergency in China since 1949. Covid-19 is often controlled at home. People rely more on the Internet to get information and express their opinions. General Secretary Xi Jinping pointed out that the current situation of epidemic prevention and control is extremely complex, and some people will feel panic and anxiety. The publicity work should be carried out in a down-to-earth manner, taking into account both the Internet and domestic and international issues, so as to strengthen confidence, warm people's hearts, gather people's minds, and better safeguard overall social stability. So we look at public opinion guidance. Based on the comment data of the official blog of "People's Daily" from 2020-01-01 to 2020-05-31, this paper extracts the key factors influencing public opinion and studies effective public opinion guidance strategies, which is of great practical significance for public opinion guidance and social governance during the epidemic.

2. Status Analysis

By the end of May 2020, COVID-19 has caused more than 80,000 infections and 4,000 deaths in China. From the discussion on coVID-19 on Weibo, in the past month, foreign epidemic situation, information on returning to school, dynamic tracking of the epidemic and good wishes for fighting the epidemic have been the most popular topics. At the end of May, the coVID-19

3.2. LDA Topic Modeling Analysis

Table 1. Topic distribution table

The theme	keywords									
Topic 1	South Korea	Beijing	Japan	The entry	control	spread of	appreciate	countries	outbreak	ban
Topic 2	Go to work	facemask	delay	Return to work	Go out	You can't buy	countries	More and more	Focus on	Qingdao
Topic 3	Come on	wuhan	isolation	hubei	America	government	epidemic	virus	measures	confirmed
Topic 4	henan	please	hope	Learn to learn	homework	measures	hurriedly	To protect the	release	data

Keywords with high eigenvalues were screened out based on TF-IDF, and themes hidden in microblog pneumonia comment data were identified with the Latent Dirichlet Allocation(LDA) model of Gibbs sample. In the number of selected Topic, the confusion degree value is smaller, the LDA model effect is better, but if the number too much, will cause the fitting model, based on the comprehensive analysis of the two factors, number 4, we choose the Topic for research subject distribution, and call the pyLDAvis draw the following graph (figure 3), at the same time, choose the Topic before the 10 keywords to display, as shown in table 1.

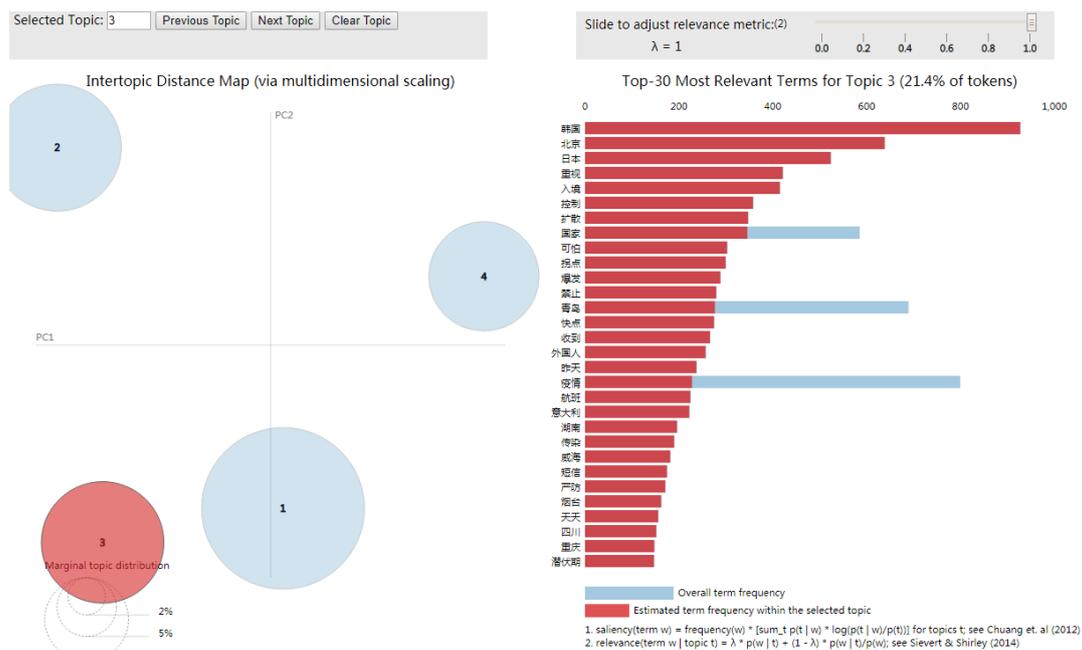


Figure 3. PyLDAvis topic distribution

Analyze the above topics:

Topic 1 is about the entry and exit epidemic prevention and control during the epidemic. People expressed that they hoped that the country would attach great importance to the influence of foreign importers on the epidemic prevention and control situation in China, and strengthen the entry and exit restrictions.

Topic 2 is about the Topic of delayed return to work. People pay more attention to the masks necessary for going out and returning to work, indicating that they are becoming more and more difficult to buy.

Topic 3 is not very clear. It not only contains regional words such as the United States and Wuhan, Hubei province, but also has many key words such as government, virus, refueling, quarantine, etc., so the Topic cannot be accurately judged.

In Topic 4, people expressed their appreciation for the hardcore prevention and control measures of Henan Province, and hoped that other provinces and cities could actively learn from henan's epidemic prevention measures.

3.3. Subject Analysis of LDA based on Emotion Classification

Using the emotion analysis in ROSTCM6, the text set was divided into three categories: positive (emotion score was (0.5~1)), negative (emotion score was (0~0.5)) and neutral (emotion score was 0.5). Among them, positive comments accounted for 31.92%, neutral comments 1.13% and negative comments 66.95%.The neutral emotional text was removed and the "positive emotional outcome" and "negative emotional outcome" were retained. The LDA thematic analysis was applied to obtain the necessary information about the epidemic.

After subject analysis by LDA, the positive comment text is grouped into two themes, while the negative comment text is grouped into three themes. Under each theme, 10 words extracted from key features are generated, and the results are shown in Table 2 and Table 3.

Table 2. Distribution table of positive comment topics

The theme	keywords									
Topic1	Come on	The good news	China	wuhan	Too good	congratulations	Pay tribute to	hubei	hero	henan
Topic2	hope	The mother-in-law	epidemic	Long life	isolation	peace	countries	blessing	great	Qingdao

Table 2 shows that:

Topic 1 members of the public paid tribute to the heroes who have made contributions to the prevention and control of the epidemic, and expressed their joy at the great achievements made so far.

People in Topic2 expressed their hope that the country will overcome the epidemic as soon as possible and that all people will be safe and healthy.

Table 3. Negative comment topic distribution table

The theme	keywords									
Topic1	China	South Korea	Qingdao	He nan	Shan dong	Japan	appreciate	The entry	government	measures
Topic2	Go to work	wuhan	facemask	The virus	isolation	hubei	countries	infection	weibo	delay
Topic3	epidemic	The United States	hope	Beijing	Learn to learn	terrible	hard	data	digital	leadership

Table 3 shows that:

People expressed their hope that the government would attach great importance to the management of imported goods and take effective prevention and control measures.

Topic 2 discussed the outbreak area, quarantine prevention and control, and delayed resumption of work.

Topic 3 is about the horror of epidemic data at home and abroad and the hard work of epidemic prevention. Meanwhile, I hope leaders can learn the vocabulary related to excellent measures.

4. Countermeasures and Suggestions

Correct guidance of public opinion is of great significance for epidemic prevention and control. Through the above analysis, it can be found that the public pays more attention to the epidemic prevention and control, resumption of work at school and prevention and control measures. The factors influencing people's positive emotions include the advanced typical deeds of fighting against the epidemic and the firm faith in defeating the epidemic. The negative emotions of the public are affected by the severe situation of the epidemic, the delay in returning to work and school, and the impact of entry and exit on epidemic prevention and control.

In order to guide public opinion on COVID-19 more accurately, this paper proposes the following Suggestions and countermeasures:

(1) Timely and effective authoritative information reporting

The first principle of public opinion response is to "pre-empt". [1] Authoritative media should publicize the real situation in a timely manner, which can not only meet the public's need to know, but also suppress the spread of rumors to the greatest extent. At the same time, we need to convey the voice of the Party and the government, uphold the principle of practicality and openness, and timely deliver information to the public. Authoritative media to social issues and problems of public opinion should be given high attention and concern, and restore the start of the epidemic prevention and control, school work and study as well as the prevention and control measures, etc., use of authoritative and credible way to respond to the social expectation, and strengthen the propaganda of prevention and control policy interpretation and the popularity of health and epidemic prevention knowledge.

(2) "temperature" propaganda can stimulate positive energy

In addition to paying attention to social issues and hot news, relevant departments should also continue to create enthusiastic, high-quality and people-oriented reports, strive to spread positive energy, and show strong humanistic spirit and people-oriented care. Outbreaks caused by the negative effect on the social and economic development, for all kinds of companies and the influence of all kinds of work, accumulated a variety of problems produced by long-term home and family and so on will cause people to produce nervous despair, depression, anxiety and other emotions, relevant departments can actively promote "epidemic" typical advanced deeds, pay tribute to fight the disease resistance of workers in a line, triumphalism and best wishes, guide the masses to strengthen the confidence, to guide the public mood, stimulate the positive energy, promote kindness, beauty and truth.

(3) Innovate publicity and strengthen public opinion guidance

In his speech at the Symposium on the Party's work in the field of press and public opinion [2], General Secretary Xi Jinping pointed out that with the development of the situation, the Party's work in the field of press and public opinion must be innovative in concept, content, genre, form, method, means, format, system and mechanism, so as to be more targeted and effective [10]. In the rapidly developing age of information, electronic, platform, by building a network communication platform and social media platform, active use of new technology and new media communication mode innovation, network short video and live, for example, in text, images, audio, video and other diversified way, to adapt to different groups to receive psychological and audience fragmentation audio-visual habits, strengthening public opinion guidance.

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