Generation and management of online rumors in the social media era

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Abstract: Today, with the rapid development of digital media technology, while people enjoy the convenience brought by social media, online rumors attached to social media are also harming people's lives. Rumors are a common occurrence in human history. In today's high-speed flow of information, network rumors have more robust propagation and destructive power. The interaction and sociality of social media provide channels for people to vent their emotions and provide space for rumors to breed. Network rumors will bring political, economic, and social harm that is very serious. Combating rumors requires the concerted efforts of citizens, media organizations, governments, and societies worldwide.

1. Introduction

The Internet has brought about an era of high-speed information transmission and increasingly diverse communication. With the help of Internet platforms, the information exchange channels between people are increasing, and the following network rumors are also based on a variety of social media, filling every corner of the network. Rampant online rumors are mainly due to the characteristics of the Internet, which has been characterized by anonymity, immediacy, and digitalization since its birth (Hunt & Matthew, 2017). And with the development of The Times, social media era. All kinds of network social media developed based on the Internet keep emerging, and the linkage of all kinds of network social media information dissemination makes the number of network rumors mushrooming with the help of these new communication channels. Compared with traditional rumors, current network rumors have more and more influence on society due to their particularity, and the social harm caused by them is also escalating (Hong et al., 2014). Nowadays, the flood of online rumors has brought problems and become a hazard in the public sphere. At the same time, because it has a practical impact on the production and life of the people in the entire society, it has also become an essential measure of the economic development trend and social stability of various countries. In the face of various challenges brought by online rumors, research on the spread and control of online rumors has been put on the agenda in many fields.

1.1 Definition and Types of Internet Rumors

1.1.1 Internet rumors

Internet rumor refers to the unverified elaboration or interpretation of people, events, or problems that the public is interested in, which is spread by netizens in a specific way in this exceptional network environment (Zhang et al., 2021). Online rumors are generally spread through social media such as Weibo, WeChat, TikTok, Facebook, network forums and video websites. Their contents involve public health, emergencies, political figures, food safety, and other fields. There are various ways to produce online rumors, including turning old news into news, changing concepts, generalizing and reproducing online rumors. Internet rumors, especially political rumors, tend to cause serious social problems and even social unrest and political instability due to their difficulty distinguishing truth from falsehood and strong demagogy. Many countries regard cracking down on online political rumors as an essential part of rumor management and adopt comprehensive policies to crack down severely.

1.2 The basic types of Internet rumors

Internet rumor is mainly composed of wrong information or misleading information, namely Disinformation and Misinformation. In addition, the purpose of spreading rumors is primarily political or economic, so that it can be divided into four categories: political-oriented disinformation, Economical-oriented disinformation, Political-oriented misinformation and Economical-oriented misinformation.

1.2.1 Political - oriented disinformation

The frequent occurrence of such rumors is closely related to the current social development situation. With the popularization of social media, social changes in all aspects are extremely rapid, resulting in various contradictions that are inevitable. However, the government's relevant policies are relatively lagging, new approaches are vacant, and old policies do not meet social development needs. Besides, the flood of such rumors reflects the great attention of the social audience to national policies and regulations, the rising desire for the timely introduction of policies to benefit the people, and the increasing demand for relevant information. It also reflects the lag of relevant national departments in promptly formulating appropriate policies and regulations. Such network rumors are similar to coercion, which arouses public opinion to promote relevant departments to develop applicable guidelines and rules (Wu, 2015). At the same time, due to the low publicity and popularization of policies and regulations issued by relevant government departments, the information circulation channels are not smooth, and the public cannot know the contents of applicable national policies promptly, which creates conditions for the emergence of such rumors and provides a breeding ground for their further dissemination. And since such rumors are completely false information, it's artificially created information that doesn't exist. They are classified as Disinformation.

1.2.2 Economical-oriented disinformation

This rumor is mainly propagated through the information difference with citizens and the lack of professional knowledge to achieve some economic purpose. For example, science class rumors in the flag of science, mixed with no well-known experts and scholars in the study and analysis, through persuasive language and seems like very rigorous scientific rational words, reduce the distance between the audience and obtain the trust of the audience (Song et al., 2021). This kind of rumor to achieve the purpose of the forward propagation extensively, such rumors type is most common in the social media.

1.2.3 Political-oriented misinformation

This kind of rumor uses highly persuasive information to influence the audience's judgment of the event to achieve specific political goals. In social media, the fabricators of such rumors take advantage of the public's distrust or hostility towards the government and spread pictures and videos involving government departments on Weibo out of context with the help of modern video editing technology to confuse the fake with the real ones (Shi, 2013). Once this type of rumor is believed and widely spread, it will still have a tremendous negative impact on officials and police even if the government can refute it in subsequent investigations.

1.2.4 Economical-oriented misinformation

This kind of rumor makes use of the fragments of the facts that have occurred to analyze, and the rumor makers make use of the information difference with citizens to create misleading information beneficial to their economic purposes, that is, Misinformation. For example, the case of MASTER KONG HOLDINGS CO LTD was made a big issue due to the company's shareholding structure (Sanyo Food of Japan is the majority shareholder with 33.39%). These so-called patriots analyzed the company's equity structure through articles to arouse people's patriotic enthusiasm for boycotting the company's products for economic purposes.

2. New features of rumors in the social media

2.1 Strong provocative

The headlines of some online rumors are eye-catching, mostly sensational or deliberately exaggerated and inciting words. In this way, such headlines attract the attention of WeChat users, arousing fear in netizens' hearts through malicious exaggeration and encouraging them to share and repost (Yan & Qiu, 2014). For example, among the top 10 rumors of 2016 summarized by WeChat public account "Rumor Filter," the no.1 article "More than 100 outsiders came from a certain place to steal children and dig organs" describes: " more than 100 outsiders from Sanya to steal children, has now arrived near Zhejiang, Zhoushan city area has lost more than 20, dissected the chest of 7 children to take organs. The urgent, earnest tone of the titles of such articles stirs up fear of outsiders and anxiety over reports of child theft and organ harvesting. There are countless rumors on Weibo about "people from other parts of the country come to rob children," Various copies of such rumors also emerge in an endless stream (Wang et al., 2020). The direct consequence of this is to drown the actual cases and cause waste of social resources.

2.2 Expeditious propagation

A noticeable characteristic of Internet rumors different from traditional rumors is the diversification of communication channels. In the Internet era, various network social platforms provide rich communication channels for the spread of rumors, and the means that network rumor makers can choose are increasing day by day. The Internet connects netizens worldwide, which makes a rumor quickly spread to every netizen with the help of the flood of information on the Internet. The spread of rumors has become simple with the help of the Internet, but the harm it has caused is gradually immeasurable. Due to the network's openness, anyone can access all kinds of information (Shi, 2013). Because of everyone's different information resolution ability, a considerable number of people will believe the false information on the network and be willing to act as the disseminator of network rumors. When Internet rumors spread from the Internet to the entire society, some rumors will cause significant damage to the politics, economy, and culture of society, seriously endanger the social stability, and pose a significant threat to people's production and life.

2.3 Diversification of sources

Traditional websites, forums, and other information can be reprinted, or sources can be found, compared with the sources of Weibo rumors are much more complex. An important reason is that Weibo users have the characteristics of anonymity. These anonymous Weibo users can still post whatever information they want, and in a variety of ways, this makes it challenging to uncover the source of rumors on Weibo (Yan & Qiu, 2014). With the strengthening of network supervision, some large Weibo platforms have made relatively large restrictions on login, such as real-name registration, but this has certain limitations and cannot fundamentally block the login and release of information by non-real-name authentication users. Some Weibo users can still post rumors anonymously. In addition, all Weibo users can delete the information they have published, making it more challenging to find the source of network rumors.

3. Perniciousness of online rumors

With the development of globalization and the progress of science and technology, communication between people worldwide has become more frequent. The harm that network rumors can bring is more extensive. The risk is not only that people misinterpret events out of context, but that many audiences will be manipulated into believing things that are not strictly false but not entirely true, thus harming the people and institutions that might otherwise benefit from the dissemination of information.

3.1 Personal life

The impact of rumors on individuals is tremendous; it is an unavoidable problem. Once a rumor is generated, it will cause harm to the parties involved. Even if the rumor is refuted, the content of the rumor will remain in most people's minds, and the established impression is hard to change. American law even states that public figures cannot Sue for defamation unless they prove that the defamer had malice, which is difficult to prove. Therefore, in the face of rumors, most people are helpless and can only comfort themselves. Politicians, entertainers, and celebrities are the most vulnerable to rumors on social media. As they are both topical and entertaining, rumors about them can always trigger heated discussions among the public. Therefore, in the pursuit of sensationalism, rumormongers often choose them as the object of demagogy and attention but ignore the harm caused to them.

3.2 Loss of media credibility

In the era of social media, people are surrounded by information, but people often discuss hot social events, whether it is moments of friends, official accounts, or offline social networking. People interpret emergencies from different angles, positions, and methods for hot events. Users' interpretation and comments on all kinds of news are also pouring in like a mountain, and the fermentation of these comments in the hearts of many netizens may produce multiple consumption and dissemination. In the dissemination process of lack of checks, this information is easy to deviate from the original information phenomenon, for rumors and false information to provide soil, long-term development will damage the media's credibility (Wang et al., 2017).

"Joe Biden Calls Trump supporters 'Dregs of Society" became a Facebook Hashtag. Facebook officials put a red exclamation mark on the news after it gained widespread attention. But users who are told it is fake are increasingly less likely to trust news accounts on social media dominated by LifeNews. This is accompanied by lower and lower credit ratings from users of social media. Due to the pernicious social impact of such social media rumors, people's trust in media organizations and politicians has gradually decreased. The terrible consequence caused by this is severe.

3.3 Intensify social contradictions

Citizens of various countries come from different social classes and have different social thoughts that reflect their social interests. The various thoughts of citizens in the society present a diversified development trend (Ji et al., 2014). In the era of social media, communication has become more convenient, and the exchange and collision of various ideas have accelerated the spread and speed of various social trends of thought. However, some online rumors aggravate the ideological division and opposition, and it is not easy to form a social consensus. This result leads to the social cost of increasing social class solidarity and cooperation, intensifying social conflicts and social division. For example, fake news creates antagonism between men and women, and class antagonism turns citizens against each other. Topics like LGBTQIA on Facebook are also hot topics for civic engagement in the public sphere. However, due to the network rumors of rumormongers, citizens of different classes and backgrounds have not reached a unified consensus. Such a split and polarized social trend of thought have torn the whole society, not just the academic circle, a terrible social phenomenon, and state at the ideological level.

3.4 The social order

The influence of rumors on social order is severe. Some rumors pointed the finger at the government, intensified the contradictions between the government and the people, and incited the people's emotions. The public living in social groups tends to be biased towards rumors and have feelings of hostility, panic, and suspicion, leading to a series of social group events and significantly impacting social stability. In social life, people's livelihood is the most real-life of the public and the public's top concern. Every seemingly insignificant thing is crucial to the average life order of the public. Rumors about social life are the most likely to cause public tension, but when there is a certain level of concern among citizens, no amount of truth or refutation becomes essential. People's everyday lives will not go on, and social order will be out of control (Yao et al., 2020). For example, since

January 1, 2022, there have been several protests in Kazakhstan over the price increase of LIQUEFIED natural gas. Rumor makers release rumors through social media, intensifying conflicts, and contradictions. As of January 18, 2022, 227 people were killed. Social media rumors intensified the conflict between citizens and the government, making the protests more bloody and violent. Social media rumors indirectly lead to more casualties and more severe conflicts.

4. Governance Strategy of online rumors

While social media brings people great convenience, it also brings new social problems. By analyzing the generation conditions and propagation characteristics of network rumors in the era of social media, rumors can see that network rumors have various formation reasons in the age of social media and have new characteristics and new propagation rules that traditional network rumors do not have.

4.1 Individual

When social media platform entrusts the public with the right to speak, it is also bound to relax the authority of information authenticity control. Information release platforms emerging in the era of social media essentially push the most active part of social information into an era of "no media structure." In contrast, social media platforms lacking information review systems realize the evolution of public social opinion to network rumors. In order to effectively stop the spread of network rumors, the key lies in the rational spirit of citizens and the enhancement of prevention consciousness. Individuals should think dialectically and carefully spread every piece of information forwarded. In order to increase credibility, current online rumors tend to provide a lot of intricate details, which require careful verification by users to discover their fallacies. If users do not check and rashly forward, it is likely to encourage the spread of rumors.

As a citizen, users should enjoy the timely information dissemination and freedom of speech brought by the Internet and keep in mind the health and authenticity of the communication content, strengthen their media literacy, and enhance their legal awareness (Eismann K, 2021). Although users have freedom of speech on the Internet, they should be based on civilized morality, not harm society or others, and should make good use of the tools in their hands. Users should exercise their rights without forgetting to fulfill their obligations, and they should be held accountable on the platform of free speech on social media. The prevention and control of network rumors are closely related to citizens' legal awareness (Liu, 2019). If users know the law and abide by it, they will be more cautious in the process of spreading online information, which will play a good role in preventing the spread of online rumors.

4.2 Media

Although the information dissemination in the age of social media challenges the information monopoly of traditional media to a certain extent, a comprehensive survey of the cases of online rumor spreading in recent years shows that traditional media is still the source of authoritative news in the eyes of the public (Li et al., 2021). When information on the Internet is difficult to distinguish between real and fake, the public tends to assume that the news reported by traditional media is more authoritative, which it is (Ni et al., 2021). Accurate reports of traditional media can effectively clarify false rumors and play a positive role in the governance of online rumors.

Although traditional media is not as fast as new media, its rich resources, and unmatched new media credibility, so that it plays a decisive role in network rumor management, journalists and editors of traditional media have been strictly trained and have rich experience in this field. They can make a reasonable choice of mass information and effectively avoid rumors at the source of dissemination. In refuting rumors, media companies invite relevant experts to analyze and answer questions and cooperate with the government and other public authorities to obtain relevant information support. These resources can be well integrated and well used in the governance of online rumors through mainstream media (Lin, 2020). The American Discovery Channel once launched a popular science

program called Myth Busters, which aimed at the widely circulated rumors and, based on professional knowledge and skills, dispelled them through experiments and achieved a sound effect of suppressing the spread of online rumors. At present, some TV media in China also use this method for reference. In the program, they analyze and dispel widespread online rumors through verification and experiment, which is conducive to popularizing knowledge and reducing the spread of online rumors.

4.3 Government

The fuzziness of information and the uncertainty of results are the main generating factors of network rumors.

First of all, the authority and service of official social media accounts should be improved, and the rumor refuting mechanism of the platform should be constantly improved. The government should update official information promptly, enhance its ability to refute rumors and enhance its credibility by providing authoritative information to citizens. Through a series of authoritative platforms, information related to people's right to know will be updated promptly, and the operation and service capabilities of the platform in preventing and dealing with online rumors will be given full play (Sun & Lu, 2013). On this basis, the rumor refuting work becomes both scientific and timely, firmly grasping the discourse power of the network public opinion field. The release of authoritative information in social media timely solves the public's doubts and prevents the public from being deceived by online rumors without their knowledge. In this way can people better maintain the order of the network and maintain social stability.

Secondly, people should speed up and improve the monitoring of online public opinion and the monitoring and research of online public opinion. The government arranges specialized personnel to monitor online information in real-time, discover the development trend of undesirable online information promptly through software and platforms, and improve information collection and reporting channels. The government's official social media accounts should work with authorities such as The Lancet and Science to counter rumors. In the process of cooperation, it takes the initiative of public opinion and improves citizens' interest in academic journals and other institutions, thus improving citizens' knowledge level in a disguised way. As the cooperation between government departments and traditional institutions deepens and citizens' knowledge level improves during this period, it will become more and more difficult to spread rumors effectively (Liu, 2016). The difficulty of refuting rumors will also become lower and lower.

Finally, the government should strengthen the crackdown on online rumors, severely punish the illegal behaviors of online rumor makers, and further improve the handling mechanism of online emergencies. To improve the emergency handling mechanism, the government needs to formulate emergency handling plans for emergencies in detail to take precautions against rainy days. Such plans include the response principles to network emergencies, the judgment and formulation of the early warning level, and the follow-up work after the event is handled. While severely cracking down on the illegal activities of Internet rumor makers (Alshible M, 2020), the government should strengthen the education and guidance of ordinary netizens.

4.4 Society

Social media has broadened people's public sphere and opened up new public places for the public. However, along with the birth of this new public sphere, maintaining this public sphere, besides relying on the government and media, also needs social forces to manage and build.

The moral climate of a society is also critical. Starting from the user's moral level, improve the netizen's media literacy. For example, celebrities and NGOs promote healthy social media environments to enhance media literacy. On the one hand, users are trained to be responsible for their social media behaviors to reduce the possibility of rumor making and spreading from the root. On the other hand, they can rationally judge the mass of social media information. Ensure that every social media user takes the initiative to control his or her expression behaviors within the scope prescribed by laws and regulations; The phenomenon of online rumors would be significantly reduced, and there will be no need for online public opinion to be guided. Users may misbelieve rumors or become the

disseminator of rumors when receiving information. Therefore, the social atmosphere to enhance users' questioning ability makes it more difficult to spread rumors. The lack of social media information verification has lost the critical function of information screening in traditional information media. Users should maintain their essential rational judgment ability when facing some radical information. Once celebrities and NGOs participate in reposting, they need to be responsible for their actions and subscribers (Wang, 2017). Through social media, correct Internet usage habits are conveyed to users, rational forms of discourse are guided, users' emotions are stabilized in the first time when crisis events occur, and various Hashtags circulating in social media are faced with a calm and rational attitude, to convey correct media use literacy to users.

5. Conclusion

To some extent, rumors reflect people's actual inner demands. By spreading such collective transactions through rumors, anxiety can be eliminated at the individual level, cognition can be obtained, and contradictions can be alleviated at the social level. Gary Alan Fine (1977), an expert on rumor research, also said that falsity is not the defining standard of rumor. The fundamental feature of the false rumor is its unpredictability, which is different from accuracy.

From the perspective of the generation and prevention of online rumor propagation, various control measures applicable to traditional rumor propagation are also applicable to the control of online rumor propagation in the we-media era, such as legal norms and technical monitoring. However, based on the characteristics of information transmission on social media platforms, the key to preventing and controlling online rumors lies in four aspects: government information is timely, open, and transparent; the influence of traditional mainstream media is fully exerted; the initiative of civil society organizations is fully mobilized, and the rational spirit and prevention consciousness of citizens are developed.

In a word, there is still a long way to go to govern online rumors in the social media environment, and only active response can minimize their harm.

References

- [1] Hunt Allcott, & Matthew Gentzkow. (2017). Social Media and Fake News in the 2016 Election, *The Journal of Economic Perspectives*, *31*(2), 211–235.
- [2] Hong, X., Nan, J., & Xia, J. (2014). Study on micro-blog rumor based on social network analysis—a case study on the micro-blog about food security. *Journal of Intelligence*.
- [3] Zhang, H., Qian, S., Fang, Q., & Xu, C. (2021). Multimodal Disentangled Domain Adaption for Social Media Event Rumor Detection, *IEEE Transactions on Multimedia*, 23, 4441–4454.
- [4] Dezhi, W. U. (2015). Rumor, crisis of legal confidence and cognitive logic. *Law Review*, 33(5), 10.
- [5] Song, Y. et al. (2021). The "Parallel Pandemic" in the Context of China: The Spread of Rumors and Rumor-Corrections During COVID-19 in Chinese Social Media, *American Behavioral Scientist*, 65(14), 2014–2036.
- [6] Shi Shangjin. (2013). Research on the spread and refutation of rumors on Weibo. Shandong Normal University.
- [7] Yan Li, Qiu Li. (2014). The emergence and change of Internet rumors in the era of we media, *Journalism Lover*, 000(001), 26-30.
- [8] Wang Xiwei, Li Wenqiao, Wei Ya'nan, & Zhang Liu. (2020). Internet Rumors in Social Media Environment: Research Dynamic and Trend at Home and Abroad, *Information and Documentation Services*, 41(2), 8.

- [9] Wang Xiwei, Xing Yunfei, Zhang Liu, & Li Shimeng. (2017). Research on the Development Trend of Network Public Opinion at Home and Abroad in the Social Media Environment, *Information and Documentation Services*, (4), 9.
- [10] Ji Hao, Su Bin, & Lv Mei, (2014). Intention of Internet Rumor Information Emotional Spreading Behavior: A Study Based on Hot-events. *Journal of Intelligence*, 000(011), 34-39,28.
- [11] Yao Qi; Cui Lijuan; Wang Yan, & Yang Ying. (2020). The Impacts of Social Media Trust on Public's Behavior of Online Rumor Self-Governance during Major Public Emergencies, *Journal of Psychological Science*, 43(2),7.
- [12] Eismann, K. (2021). Diffusion and persistence of false rumors in social media networks: implications of searchability on rumor self-correction on Twitter, *Journal of Business Economics: Zeitschrift für Betriebswirtschaft*, 91(9), 1299–1329.
- [13] Liu Gusheng. (2019). Network public opinion governance in social media, *New Media Research*, 5(5), 4.
- [14] Li, Z. et al. (2021). Social media rumor refutation effectiveness: Evaluation, modelling and enhancement, *Information Processing and Management*, 58(1).
- [15] Ni, S., Li, J., & Kao, H. Y. (2021). Rumor detection on social media with hierarchical adversarial training.
- [16] Lin Hua. (2020). The Market Mechanism of Governance to Internet Rumor, *Administrative Law Review*, (1), 11.
- [17] Sun Wanhuai, & Lu Hengfei. (2013). Criminal law should rationally deal with Internet rumors an empirical evaluation of judicial interpretation of Internet rumors, *Law Science*, (11), 17.
- [18] Liu Xianquan. (2016). The Construction and Perfection of Criminal Law Regulation System about Online Rumors, *The Jurist press*, (6), 15.
- [19] Alshible, M. (2020). Social Media Rumors in Time of Corona Pandemic, Why & How Is Criminalized? (Comparative Study). *Journal of Advanced Research in Law and Economics (JARLE)*, 11(3), 719–725.
- [20] Wang Jian. (2017). Spread and governance of rumors in the social media environment. Chongqing Technology and Business University.
- [21] Rosnow, R. L., & Fine, G. A.. (1977). Rumor and gossip: the social psychology of hearsay. *Canadian Journal of Sociology*, 22(5).