ATLANTIS PRESS

Causes and Consequences of Network Social Information Overload
—— Analysis Based on the Outbreak of New Crown Pneumonia

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ABSTRACT

In order to run orderly in network society and meet people's demand for beautiful and clear cyberspace, we need to pay more attention to this phenomenon. Under the background of epidemic situation, the reasons of network social information overload mainly come from four aspects: the tension, complexity and repeatability of epidemic information, the ecological environment of Internet attention economy, the push mechanism of network platform and the characteristics of demand satisfaction and differentiation of network audience. The consequences of epidemic information overload on the audience are as follows: it is easy to cause emotional problems of the audience and then affect physical and mental health; a large number of inferior false information may obscure the rational cognition of the audience and reduce the ability of the audience to deal with information. In the face of information overload, we need the joint efforts of network platform, network media, laws and regulations, and network audience.

Keywords: New crown pneumonia epidemic, network society, information overload, cause and effect

1. INTRODUCTION

As we bid farewell to 2019, a sudden epidemic began to spread to the whole country and even the whole world from Wuhan, Hubei Province. On the one hand, the new coronavirus pneumonia is aggressive, the epidemic situation is urgent, affecting the hearts of countless people; on the other hand, the physical space of the general public is closed on a large scale. In this context, cyberspace becomes the distribution center of epidemic information, the discussion center of epidemic events,[1]Also become the social space that carries the mass rich social activity. However, it is accompanied by the information explosion and information overload in cyberspace. All kinds of epidemic information are everywhere, which not only frequently attract the attention of the network audience and stimulate the mood of the audience, but also carry all kinds of rumors and false information, causing negative emotions such as audience tension, panic, anxiety and even irrational behavior. Academic research on information overload has a long history. Information overload refers to the situation that information exceeds the range that individuals or systems can accept, process or use effectively, and leads to failure.[2]The term first appeared in the study of organizational management in Gross, and then A • Toffler widely recognized in the 1970 book Future shock.[3]

2. REVIEW OF INFORMATION OVERLOAD LITERAURE

Through the review of information overload related literature, it is found that with the development of information communication technology, the performance of information overload in mobile Internet environment has new characteristics: generalization of user information overload, passivity of overload and normalization of overload.[4]In addition,The focus of previous studies mainly includes three aspects: the influencing factors of information overload, the influence consequences and the coping strategies.

First of all, in the influence factors of information overload, Some scholars have summed it up as system characteristic factor, information characteristic factor and user's psychological factor, behavior factor and social factor.[5]Secondly, in terms of the influence consequences of information overload, some scholars generalize the influence of information overload into four parts: information retrieval, information analysis and information organization, decision-making and individual psychological subjective feelings.[3]Some scholars also sum up the consequences of information overload as psychological and behavioral consequences, and think that information overload will lead to negative emotions such as burnout, emotional exhaustion, dissatisfaction and so on, and cause their unsustainable use or transfer behavior, information avoidance behavior and so on.[5]Thirdly, in the aspect of information overload coping strategy,

previous studies mainly focus on two levels: user and information server. From the user's point of view, it includes the active strategy of using information retrieval tools such as search engine, personalized information push and improving personal information literacy, and the passive strategy of reducing the impact of information overload only by reducing the amount of information received and reducing the use of digital information technology, while maintaining the environment, its own ability and information processing methods. From the point of view of information service providers, it is mainly to improve the platform information service environment, improve the platform information service technology, organize the information content reasonably, improve the information quality, analyze different information needs, and provide personalized information services.

In the context of the epidemic situation, the problem of information overload has also attracted the attention of a few scholars. For example, Wang Shiwei pointed out that information overload is one of the most important characteristics of information epidemic.[6] Zhao Li believes that in the new crown pneumonia epidemic period, should maintain sober optimism, alert to information overload depression. The main symptoms of overload depression are depression, irritability, sadness, emptiness and even despair for most of the day, negative attitudes towards the past, present and future, characterized by concealment and a lack of power to change reality.[7]Through a review of the literature,The information overload phenomenon in the network society under the epidemic situation of new crown pneumonia has attracted some attention in academic circles, but it is not systematic and perfect, so it needs further attention and research by scholars.In summary, based on the previous research on information overload, this paper analyzes the causes, consequences and coping strategies of network social information overload under the special social background of new pneumonia epidemic situation from the perspective of network sociology.

3. CAUSES OF INTERNET SOCIAL INFORMATION OVERLOAD IN THE CONTEXT OF OUTBREAK

For the reasons of network social information overload under the background of epidemic situation, the following will mainly discuss from four aspects: epidemic information characteristics, Internet ecological environment, network platform mechanism and network audience.

3.1. The Tension, Complexity and Repeatability of Information on the Epidemic Situation

Firstly, the epidemic situation is related to everyone's life and health, whether it is sympathy and empathy for the life of strangers, or concern for the safety of individuals or relatives and friends, it is easy to affect personal tension. The tension of epidemic information has been amplified in the continuous brush screen, and the massive epidemic information frequently stimulates the emotion of the network audience, which easily brings emotional problems to the audience and forms information overload. Secondly, new coronavirus pneumonia is a physiological disease. Its understanding and judgment involve a lot of medical knowledge, but the general public does not have such a knowledge background, so the network audience is often difficult to distinguish between true and false in the face of various epidemic information. Thirdly, in the new media era, there are a large number of online information publishing subjects. During the outbreak of the new crown pneumonia, the epidemic has become the focus of various official accounts, self-media attention, reprinting, re-editing or editing and multi-platform release, so that the network audience is often brushed by a certain type of epidemic information screen, receive a large number of repeated information, resulting in information overload experience.

3.2. Information Overload in the Attention Economy

By studying the network ecology behind information overload, it can be found that the Internet attention economy leads to the production of a large number of inferior false information, and this kind of information greatly enhances the network audience's perception of information overload. Attention economy, also known as "eyeball economy ", refers to the network to attract attention to win economic benefits. The development of network society has evolved the pursuit of traffic, behind which is the pursuit and favor of capital to traffic. Under the guidance of economic interests, a large number of marketing numbers fill every corner of cyberspace, and even conspire with some network platforms to produce a large number of headline party news. During the outbreak, financial magazines launched a series of in-depth reports, but less influential than some so-called online fashion articles. Network media can use search engines instead of trekking mountains and rivers, through second-hand information integration of news reports, to achieve the same effect. This kind of "traffic first" business thinking is popular, bad money drives out good money, for the network audience, receiving a large amount of this low-quality, fragmented rather than high-quality information is the key reason for perceiving information overload.

3.3. Passive Browsing under Push Mechanism

The network information production activities are becoming more and more active, and the information generated is more abundant. The push mechanism of the network platform broadens the road for the differentiation and consumption of information, and provides

convenience for the network audience to obtain information. It also makes the audience more constrained by mass network information. The push of the network platform has many forms: when the mobile phone notification allows, the information push of various mobile phone software is overwhelmed; the subscription public number in WeChat, the people concerned in Weibo and the subscription concern number of other platforms, all kinds of push information come in when the software is opened. During the epidemic period, all kinds of epidemic information often appear on the mobile phone screen of the audience through these push channels of the network platform, but it is difficult for the network audience not to receive the epidemic information under various powerful push. In such a situation, the network audience is in the passive browsing to obtain epidemic information, while the passive browsing information content is generalized, may be the audience do not want to receive, not interested, do not pay attention to, so here appears the audience's perception of information overload. In addition, network audiences often obtain information in passive browsing, rather than actively searching for the information they need, simply replacing their own ideas with what they see and hear on the Internet, and lacking their own in-depth thinking and judgment. This is not conducive to the healthy and good development of the network society.

3.4. Demand Satisfaction and Differentiation of Network Audiences

Network audience is the subjective factor of information overload. Under the background of epidemic situation, it is mainly reflected in the characteristics of audience's demand satisfaction and differentiation. First of all, the network audience has its own subjective motivation to obtain the information of the network epidemic situation, which includes the demand for security and the acquisition of the sense of control. New crown pneumonia poses a great threat to human life and health, and because of its extremely infectious nature, it expands its risk in a highly mobile modern society. In public awareness, uncertainty in many daily lives increases. More deterministic information is needed to reduce this uncertainty. For example ," is there a confirmed case in your community ?" "What is the mortality rate of new coronary pneumonia ?" "Does new crown pneumonia have special medicine ?" …… The audience urgently needs more information on the epidemic to determine the safety of their environment and a sense of control over the dangerous situation under the epidemic. Under the guidance of this mentality, Some audiences will spend a lot of time every day to brush the epidemic dynamics, so that they are constantly in the epidemic tension. Secondly, the differences of different audiences in demographic characteristics, mentality, ability to process network information are also important factors of perceived information overload. With the popularity of smart phones, a group of network audiences have not entered the mobile network era directly through the PC era

of the Internet. They lack the experience of dealing with the complicated network information and are caught unprepared for all kinds of epidemic information. In addition, the network audience is affected by the educational background, urban and rural differences and other factors in the network information response ability differences, the low level of education, rural areas of the audience's ability to respond to network information is lower, because of the lack of corresponding knowledge background, Lack of discrimination of various poor epidemic information, vulnerable to network rumors, so it is difficult to deal with the risk of information overload.

4. CONSEQUENCES OF NETWORK SOCIAL INFORMATION OVERLOAD IN THE CONTEXT OF EPIDEMIC SITUATION

4.1. Impacts on Physical and Mental Health

In the face of overloaded epidemic information, on the one hand, people worry about the safety of the external environment, sympathize with the misfortune of others. People's emotions are stimulated frequently with the rapid updating of network information, and the risk of emotional problems increases gradually.On the other hand, they are too concerned about the health of themselves and their relatives and friends, manifested in frequent body temperature, hand washing, once the body temperature is slightly higher or cough, will be very nervous. There are reports on the Internet that Guangdong Shunde woman Ah Zhen brushes epidemic information, suspects oneself infection, even appears the stress behavior of suicide.[8]This is the extreme case that information overload affects physical and mental health. Poor quality diet and sleep, as well as pessimistic and negative mentality, can easily lead to low immunity, resulting in other physical diseases.

4.2. Reduced Information Capacity

Because of the tension and complexity of the epidemic situation, all kinds of epidemic information are mixed, and the sediment is mixed, which disturbs the audiovisual of the network audience. The original intention of people browsing network information is to increase the understanding of the epidemic situation and increase the certainty and controllability of the environment. However, the complicated network information takes up a lot of time and energy, but enhances the fuzziness of the epidemic situation. In addition to objective, systematic and professional news reports, there are many inflammatory, fragmented and unconfirmed information, which greatly reduces the network audience's mastery of the epidemic situation and even makes irrational behavior under the guidance of false information. When the "preliminary

discovery: Chinese patent medicine Shuanghuanglian oral liquid can inhibit the new crown virus" news spread, Shuanghuanglian snapped up overnight goods, veterinary drugs are not let go, wrong information induced people's behavior can not be said to be crazy, and even "drinking high alcohol can resist the new crown virus "," child urine can prevent the new crown virus" and other rumors repeated screen, for a time, the truth is difficult to distinguish, people are easy to take inappropriate preventive measures in this case. In addition, in the face of massive epidemic information, people have no time to digest the hot information in front of them, there are new hot search topics on the list, information changes quickly, people do not seem to need to think about themselves, read the news hot search and other people's views, As if it was their own harvest. In fact, the audience of information should be more active, useful information to the audience is valuable, too much affected by irrelevant information, occupy their own time and energy, do not have their own independent thinking, what is the harvest?

4.3. Excessive Immersion Networks

Under the background of information overload of Internet epidemic situation, the audience is easy to immerse the network too much. First of all, the subjective demand of the network audience for the epidemic information increases the use of the network, and also increases the dependence on the network and the degree of immersion in the network. The network audience needs to spend a lot of time and energy to receive the epidemic information, and the mechanism of personalized recommendation and related push of the network platform has prepared unlimited information for the audience and expanded the time of the audience to use the network again. Secondly, the anxiety caused by browsing the epidemic may lead to people being unable to concentrate on other things. Network is a kind of information technology, which should be a tool for people to improve their work efficiency, and the excessive immersion of the network caused by information overload will reduce the efficiency, which is not conducive to the healthy development of the network society.

5. RECOMMENDATIONS AND CONCLUSIONS

The epidemic situation of new crown pneumonia exacerbates people's perception of the phenomenon of network social information overload. In order to build a healthy network society in the future, we need to pay more attention to this phenomenon. For how to deal with information overload, we can consider the following aspects: network platform, build health anti-addiction system, reduce information push projects; network media, improve information content professionalism, consider information humanistic value care; legal system,

Strengthen cyberspace law enforcement, network disinformation can not be tolerated; network audience, improve their own information literacy is the key, actively browse information, refuse passive push, give play to their own initiative, reduce external disturbance. People often say that the Internet is a double-edged sword, information overload is one of the negative social functions of the Internet, we know it, understand it, so that we can better deal with it, but also help us to live a better life in the network society.

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