

Research on the microblog information anxiety situation and coping strategies of college students in the post-epidemic era

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Abstract: *In the special environment of the post-epidemic era, the anxiety of college students' microblog information is also spreading. This paper adopts the questionnaire method, from the influencing factors of college students information anxiety, explore the outbreak of college students weibo information anxiety after the reality and influence, combined with the results using SPSS 26.0 information cognition, information literacy, information quality, information demand four dimensions, from the government, microblogging platform, college, students, the weibo information anxiety prevention strategy, aims to help college students get rid of weibo information anxiety, optimize the information behavior, more accurate access to effective information.*

Keywords: *post-epidemic era; college students; microblog information anxiety*

1. Introduction

Since December 2019, a novel coronavirus outbreak has occurred in China. Now, through the country's active response and strict prevention and control, the adverse impact of novel coronavirus on Chinese society and production has been basically eliminated^[1]. But in the post-epidemic era, the aftermath of the epidemic still affects our daily lives. On June 16, 2020, Chinese President mentioned the term "post-epidemic era" in a phone call with Tajik President Sergei Rakhmon^[2]. The post-epidemic era, as the name suggests, refers to the era when the epidemic prevention and control is gradually normalized after the novel coronavirus epidemic has passed. In the post-epidemic era, the epidemic may not completely disappear, but sometimes fluctuated^[3]. In this era, the "information epidemic" has with the epidemic^[1], caused the network information chaos and the spread of false information, easy to cause information anxiety. Due to the epidemic, the prevention and control measures for college students, such as school closure or online learning at home, make college students obtain more information on microblog platforms, and the complex information environment of microblog has an impact on college students' microblog information anxiety to varying degrees. This paper combines the reality and dilemma of college students' microblog information anxiety under the new situation, and explores appropriate solution strategies, hoping to help college students to alleviate their microblog information anxiety and improve their information literacy through the current situation and survey results of college students' microblog information anxiety in the post-epidemic era.

2. Research background

Information anxiety was a concept that emerged after entering the "information society" in the 1950s. It was originally created by American information building master Richard Saul Wurman^[4] in 1989, in his book *Information Anxiety*, he argued that information anxiety is "a black hole between data and knowledge, when the information is not needed" or "the difference between the information that is already understood and the information that should be understood^[5]." With the interweaving of the post-epidemic era and the Internet era, the Internet has penetrated into every aspect of people's lives. The combination of the network information environment, the complex situation in the post-epidemic era and the immature psychology of college students can easily lead to the information anxiety of college students, which will have a negative impact on students' study, life and even their physical and mental health. Based on the investigation of college students' microblog information anxiety, this paper explores the influencing factors of college students' microblog information anxiety, and provides reference opinions for college students to deal with microblog information anxiety and improve their information literacy.

3. Research design

3.1 Research object

In this paper, college undergraduates are selected as the research object, using the method of group sampling, and issuing questionnaires based on the questionnaire star platform, mainly through QQ group or wechat group, and other communication platforms among college students. A total of 500 questionnaires were distributed, and 27 invalid questionnaires were excluded, and 473 valid questionnaire samples were finally obtained, with an effective recovery rate of 94.6%. Among them, 232 boys, 241 girls; the number of freshmen to seniors is 97, 132, 156 and 88 respectively.

3.2 Research tools

The research tool is the microblog information anxiety questionnaire of college students in the post-epidemic era. This study is mainly based on the five characteristics of the information summarized by Wurman: that is, do not understand the information content; the amount of information needed to know whether some information exists, do not know where to find information; know where the information is, but do not know how to find it^[5]. Based on the microblog platform, the investigation and research were conducted from the microblog information anxiety of college students, drawing on a variety of relatively mature information anxiety scales, and referring to Cao Gang of Jilin University (2011)^[6] the information anxiety questionnaire has developed a more suitable microblog information anxiety measurement questionnaire, with a total of 18 questions, including information cognition, information literacy, information demand, information quality and other dimensions (see Table 1). In terms of consistency coefficient, the internal consistency of the questionnaire is measured. Statistical analysis showed that the reliability of each factor of the questionnaire was good, and the α -value of the total questionnaire was 0.822. The reliability coefficient of each dimension ranged from 0.693 to 0.791 with high confidence (see Table 2).

By measuring user needs and anxiety on the Likert scale, the degree of anxiety is described according to the importance of the degree of anxiety, from "complete nonconformity" to "full compliance" to "1" to "5". The SPSS26.0 statistical analysis software was used to conduct descriptive statistical analysis of the data collected by the questionnaire, and then multi-factor analysis of variance, analysis of each dimension and other methods were used to analyze the characteristics of different factors and dimensions to explore the differences in the characteristic level of college students' microblog information anxiety.

Table 1: Name and included title of each factor

Factor	Contains the topic
Information cognition	Q 4, Q 9, Q 10, Q 13, Q 15, Q 16
Information literacy	Q 11, Q 12, Q 18
Information requirements	Q 3, Q 10
Information quality	Q 4, Q 5, Q 6, Q 7, Q 8

Table 2: Reliability coefficient of microblog information anxiety questionnaire for college students in the post-epidemic era

	Coefficient of internal consistency	Split-half reliability
Total questionnaire	0.822	0.717
Information cognition	0.742	0.704
Information literacy	0.693	0.652
Information requirements	0.791	0.661
Information quality	0.765	0.713

4. Research status

4.1 Basic situation of college students' microblog information anxiety in the post-epidemic era

In this study, microblog information anxiety was divided into four dimensions for analysis, and the questionnaire scores were ranked from high to low. The questionnaire items scored 1 to 5 points, 4 to 5 for high information anxiety, higher than 76 into high group; 1 or 2 for low information anxiety, and

lower than 38 for low group. As can be seen from Table 3, the proportion of students with high information anxiety and low information anxiety accounts for 7.40% and 5.71% respectively, while the students with high information anxiety are still in the minority. The vast majority of students are in a state of moderate information anxiety. It can be seen that the microblog information anxiety of college students in the post-epidemic era is relatively serious.

Table 3: Distribution of microblog information anxiety among college students in the post-epidemic era

Degree of information anxiety	Number of people	The proportion of (%)
Tall	35	7.40
Centre	411	86.89
Low	27	5.71
Amount to	473	100

4.2 Descriptive statistical analysis of college students' microblog information anxiety in the post-epidemic era

4.2.1 Multivariate Analysis of Variance of Gender and Grade on Information Anxiety in Weibo

In order to study the differences in gender and grade in information anxiety degree, gender and grade were used as the independent variables, and the scores of microblog information anxiety questionnaire were used as the dependent variables. For details, see Table 4, $F = 12.113$, $p = 0.003 < 0.01$; for grade difference, $F = 10.864$, $p = 0.015 < 0.05$. It can be seen that there are significant gender and grade differences in college students' microblog information anxiety in the post-epidemic era. In terms of gender, the anxiety of girls' microblog information is higher than that of boys, and the reason may be that girls pay more attention to microblog than boys, and some studies also show that the anxiety of girls is higher than that of boys. Under the comprehensive influence of the two, the anxiety of girls' microblog information is higher than that of boys. In the grade, the anxiety of junior and senior students is higher than that of freshmen and sophomore students. This guess is, freshman and sophomore students for the new stage of learning is still in a relatively fresh state, the weibo entertainment information attention is higher, and junior and senior students face entrance, looking for a job, etc., the microblogging information query and understand more attention to its practical and long-term development, the different problems and tasks, lead to the difference of the weibo information anxiety.

Table 4: Multivariate variance analysis of gender and grade in terms of microblog information anxiety

Source of variation	Free degree	Mean square deviation	F	p
Sex	1	512.326	12.113	0.003
Grade	1	503.872	10.864	0.005
Gender*grade	1	98.459	2.525	0.018
Error	356	37.694		
Amount to	359			

4.2.2 Analysis of gender and grade in all dimensions of microblog information anxiety

Table 5: Mean number and variance of gender and grade in all dimensions of microblog information anxiety

Project		Information cognition	Information literacy	Information quality	Information requirements
		$\bar{X} \pm S$	$\bar{X} \pm S$	$\bar{X} \pm S$	$\bar{X} \pm S$
Nature leave	Man	12.63±2.54	17.14±2.82	7.29±1.98	7.68±1.60
	Woman	13.97±2.66	17.88±2.57	7.53±1.79	7.87±1.45
Year level	Freshman	13.96±2.78	17.55±2.66	7.62±1.53	8.11±1.78
	Sophomore	14.11±2.65	17.78±2.43	7.34±1.21	8.25±1.51
	Junior	14.15±2.90	16.96±2.79	7.81±1.36	8.56±1.70
	Senior	14.13±2.83	17.71±2.61	7.87±1.42	8.52±1.35

In the process of compiling the information anxiety questionnaire, the questionnaire was divided into four dimensions: information cognition, information literacy, information quality, and information demand. In order to investigate the cause mechanism of college students' information anxiety, the mean value and standard deviation of different genders and grades in each dimension of information anxiety were obtained through data analysis. The higher the score is, the more the respondents agree with this

dimension, and the more likely their information anxiety is to be affected by this dimension. Specific data are given in Table 5. In the dimension of information cognition, there are significant differences between gender and grade; in the dimension of information literacy, gender has significant main effect and grade also has significant main effect; in the dimension of information quality; in the dimension of information demand, the main effect of gender and grade is not significant, but also related.

4.2.3 Analysis of information anxiety among college students in the post-epidemic era

Information cognition mainly refers to the understanding and cognition of the required information before or in the process of obtaining information^[6]. As can be seen from the statistical average scores in Table 6, the average score of information cognition factors is 24.37, which is higher than the theoretical average of 18, and is above the average level, indicating that college students are uncertain in information cognition in the post-epidemic era, and indicates a high degree of microblog information anxiety among students.

Table 6: Statistics of information anxiety and information cognitive factors on Weibo

Descriptive statistics				
	Average value	Standard deviations	Least value	Crest value
4. Your information acquisition results of Weibo and your original retrieval intention	3.10	0.987	1	5
9. During the epidemic, what content do you think on Weibo has influenced your ideas most	5.74	0.961	1	5
10. You think there was too much false information on the Weibo platform during the epidemic period	3.51	0.897	1	5
13. You have complained about the Weibo platform for many times during the epidemic period	3.18	0.823	1	5
15. You feel that you are often deceived by the messages on the Internet	3.73	0.834	1	5
16. I often worry about missing the latest information	3.96	0.904	1	5
Information cognition, and the factor score	24.37	7.195	6	30

4.2.4 The analysis of information anxiety and factors of college students in the post-epidemic era

Information literacy mainly refers to users' ability of information retrieval, discrimination and utilization^[6]. According to the data in Table 7, most college students are prone to feel tired and irritable about the large number of microblog information, but they also struggle without knowing how to find reliable epidemic information to varying degrees, and shake their opinions from others' comments. It can be seen that in the post-epidemic era, college students' microblog information anxiety is affected by various factors and lack of high information literacy.

Table 7: Statistics of information literacy factors of microblog information anxiety

Descriptive statistics				
	Average value	Standard deviations	Least value	Crest value
11. During the epidemic period, you received a lot of information from the Weibo platform every day, for which you felt tired and irritable	3.65	0.894	1	5
12. You don't know how to find reliable information about the epidemic on Weibo	2.78	0.955	1	5
18. During the epidemic, others' negative comments and keyboard men easily made me feel anxious	3.92	1.006	1	5
Information literacy, and a factor score	13.96	3.587	3	15

4.2.5 Analysis of information quality factor of microblog information anxiety among college students in the post-epidemic era

Information quality mainly refers to whether the information obtained by users through information retrieval is true, whether there is false, and whether the scientificity and authority of the information can be guaranteed^[6]. From the data from Table 8, it can be seen that most students believe that the microblog information is mostly false, and doubt the credibility and scientificity of the information obtained, and thus cause anxiety, tension and even irritable emotions, thus increasing the possibility of information

anxiety.

Table 8: Statistics of information quality factors for microblog information anxiety

Descriptive statistics				
	Average value	Standard deviations	Least value	Crest value
3. You are very convinced of the information provided by Weibo	2.38	0.857	1	5
10. You think there was too much false information on the Weibo platform during the epidemic period	3.86	0.911	1	5
Information quality factor score	7.81	2.237	2	10

4.2.6 Analysis of information demand factors for microblog information anxiety among college students in the post-epidemic era

Information demand mainly refers to users' expectation and dependence on information. The purpose of users' using microblog is also one of the reasons for information anxiety^[6]. As can be seen from Table 9, most of the surveyed students have said that they used Weibo longer than in the past, and they may feel nervous about the information content about the epidemic released by Weibo, which causes information anxiety.

Table 9: Statistics on information demand factors of information anxiety in Weibo

Descriptive statistics				
	Average value	Standard deviations	Least value	Crest value
4. Your information acquisition results of Weibo and your original retrieval intention	3.38	0.832	1	5
5. Use the microblog time every day during the epidemic period	3.99	0.932	1	5
6. During the epidemic, you spent Weibo more than before	3.57	0.857	1	5
7. During the epidemic period, which kind of information do you pay most attention to when using Weibo	4.17	0.846	1	5
8. For you, the most important role of microblog during the epidemic is	4.23	0.859	1	5
Information demand factor score	17.56	417.2	5	25

5. Analysis and discussion of the influencing factors of college students' information anxiety in the post-epidemic era

5.1 Overall analysis

According to the survey results, there are four factors affecting college students' microblog information anxiety: information cognition, information literacy, information quality and information demand. In terms of information cognition, more than half of the students think that the results of microblog information acquisition are in line with their original retrieval intention; most students say that their ideas are easily influenced by the comments of public figures, the information published on official accounts and the comments of most netizens, and make wavering choices. In the dimension of information literacy, most students indicated that they felt tired and irritable when receiving a large amount of information from the Weibo platform every day during the epidemic. And a small number of students do not know how to find reliable information about the epidemic on Weibo. In terms of information quality, some students believe that there were too many false information on Weibo platforms during the epidemic period, and they were not very convinced of the information provided by Weibo. In terms of information needs, the impact of the epidemic has increased the frequency of students using microblogs, and paid more attention to the information content of the epidemic

5.2 Analysis of the causes of college students' anxiety about microblog information in the post-epidemic era

5.2.1 The influence of the environmental background

The post-epidemic era was born in the Internet era. The development of the Internet provides convenience for the dissemination of epidemic information. The microblog platform with the development of the Internet is one of the important channels for many students to obtain information. College students can receive and consult from Weibo at any time. There is a huge amount of relevant epidemic information, but there is a large amount of homogenized information, such as a large number of media accounts publishing information with the same content^[1], not only occupies network resources, but also consumes students' attention, causing anxiety about microblog information. Secondly, on the one hand, microblog provides a convenient platform for the dissemination of epidemic information, and on the other hand, due to the weakening of information gatekeepers^[1], information distortion, information misinformation, false rumors and other events occur from time to time, which seriously interfere with the correct cognition of information among college students, and cause information anxiety and panic.

5.2.2 The impact of information demand

According to the survey results, the number of post-epidemic times of college students using weibo has increased than usual, and college students are more eager for relevant information, hoping to understand the development situation of the epidemic through obtaining information on Weibo^[1], Thus forming a strong demand for information. Excessive attention to information affects the psychological state of students, and the anxiety of microblog information follows.

5.2.3 The influence of information literacy

Related studies show that information literacy is an important factor in users' anxiety in information activities^[7]. The lack of information literacy, such as the strength of information awareness, the expression of information needs, information retrieval skills, information understanding ability and information screening ability, may lead to information anxiety^[1]. Therefore, the higher the health information literacy of college students, the more they can clearly express their information needs and retrieve relevant information through microblog. On the contrary, the more information barriers encountered in information activities, the more likely to produce microblog information anxiety.

5.2.4 The influence of student psychology

In the post-epidemic era, college students' willingness to obtain and pay attention to microblog information has greatly increased, and some college students also have the psychology of information loss^[1], unconsciously and frequently retrieve information. Relevant studies found that the degree of information attention significantly influenced college students' ability to screen information^[8]. The more attention to information, the higher the ability of college students to identify information, and the higher their information literacy. But at the same time, the more information attention of college students, the more likely to form a high dependence on information, leading to information anxiety.

6. Countermeasures and suggestions for college students' microblog information anxiety in the post-epidemic era

Through the investigation and research, the following reference suggestions are put forward for the influencing factors of the genetic mechanism in the research results.

6.1 Strengthen information governance and establish an authoritative information release system

Through the survey, most students said they were vulnerable to the external environment and other people's comments. Relevant government departments should strengthen the intensity of information governance, optimize the environment of microblog information dissemination, and then prevent the spread and spread of microblog information anxiety. First of all, relevant departments should strengthen the governance of false information and improve the control mechanism of microblog information. On the one hand, an authoritative information release system integrating the government, experts and media^[9]. Government departments took the initiative to disclose real-time epidemic information in a timely manner to maintain the credibility of official government information. Experts timely answer public doubts and ease public panic; the microblog platform timely and accurately convey information to reduce rumors caused by information and imbalance. On the other hand, improve the microblog

information governance laws and regulations system. We will take strong measures to rectify the Internet environment, establish and improve information control laws and regulations, and severely crack down on rumor-mongering. At the same time, the microblog official should maintain the platform information management and system, give full play to the advantages of the microblog platform, and with the help of the fast update speed of microblog information, the large number of users and the younger characteristics, make the microblog platform to deliver real-time information efficiently and simply, improve the quality of information, and relieve the public information anxiety^[1].

6.2 Reduce the dependence of students' microblog information and strengthen students' mental health education

It can be seen from the above reason analysis that the degree of dependence of college students on microblog information in the post-epidemic era has a certain impact on their information anxiety psychology. Too much blind reliance on microblog information is easy to get students into the letter, and reduce students' information ability. College students should change their understanding and anxiety about information receiving, enhance their subjectivity, strengthen their cognition of the current microblog environment and network information quality, clarify their information needs, and improve their information cognitive ability and information literacy. Colleges and universities can also actively carry out psychological education lectures and psychological counseling for college students, help students to correct cognitive deviation of epidemic, correct treatment of weibo information content, alleviate weibo information anxiety, improve students' psychological quality and information discrimination, cultivate students in search and identify information keep a peaceful state of mind.

6.3 Improve students' personal information literacy

Information literacy is a collection of comprehensive abilities to discover information, understand information, use information to create new knowledge, and participate in community learning^[10]. The information literacy of college students has an important influence on the degree of information anxiety. College students with high information literacy can accurately express their information needs and obtain their required information resources. However, college students who lack information literacy may be faced with problems such as blocked information query conditions and incorrect information discrimination when conducting information retrieval, resulting in anxiety, irritability and other emotions, thus causing information anxiety. Therefore, improving the information literacy of college students is helpful to alleviate the anxiety of microblog information. College students should use microblog reasonably and efficiently, have information advantages, and improve the ability of retrieval, screening and processing of microblog information^[11], reduce the anxiety degree of microblog information.

7. Conclusion

In this study, we analyzed the current situation and influencing factors of college students' microblog information anxiety in the post-epidemic era through questionnaire survey, and proposed relevant coping strategies based on this. From the analysis of the survey results, it can be seen that the overall environmental impact of the post-epidemic era increases the frequency of students using and checking microblogs. The difference of students' own information cognition and information literacy are not highly convinced of microblog information, which leads to many students who are vulnerable to the influence of external factors and shake their ideas. The complexity and authenticity of information cause students' information anxiety. Based on this, this study discusses strategies from relevant government departments, microblog platform, university management, individual students, etc. The relevant departments release real information timely and establish authoritative information release system; the microblog platform should manage its own information and maintain good platform information environment; colleges and universities coordinate to strengthen mental health education for college students and improve information ability; individual students should constantly improve themselves and improve information literacy. In the post-epidemic era, college students should cooperate in dealing with the anxiety of microblog information, alleviate the anxiety of students' microblog information, and promote the development of students.

Acknowledgments

- 1) Research on Risk Communication Mechanisms in Environmental Collective Events Governance

(20RWYB04).

2) Research on the microblog information Anxiety Situation and Coping Strategies of College Students in the Post-Pandemic Era (21XSKY04).

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