



Research on Behavior Changes of Chinese College Students on Weibo in the Context of COVID-19

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Abstract. During the epidemic, people spent more hours using social media due to home quarantine and government-related epidemic prevention measures, so people's various behaviors on Internet platforms changed dramatically. The authors used a questionnaire method to study the behavioural changes, usage motivations and content preferences of college students as the target group. This study is innovative and meaningful in studying the behavioural changes of Chinese college students on Weibo and analysing their influencing factors in the context of Covid-19. And this study has some reference value for the subsequent researchers. The authors found that college students' behavior changed dramatically in terms of community involvement, such that they became more irritable, became involved in a different community than before the epidemic, and had higher levels of anxiety.

Keywords: COVID-19 · Chinese College Students · Weibo · Behavior

1 Introduction

China has made positive progress in epidemic prevention and control, adopted good epidemic prevention policies and methods, and the epidemic situation is gradually developing towards a good trend. The epidemic has a great impact on Chinese college students. Some offline courses have been changed to online courses, and online courses have become the mainstream course mode at present. Graduates also have great difficulties in employment due to the impact of the epidemic. Candidates for postgraduate entrance examination also have great difficulties because of the epidemic. Safety issues and whether they can successfully participate in the examination are a great test. Weibo was founded on August 14, 2009. By September 2020, Weibo had 511 million monthly active users and 224 million daily active users. Weibo user groups continues to show a trend of youthfulness. Female users are larger than male users. According to Weibo's 2021 financial report, Weibo's annual operating revenue was \$260 million and its annual

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net profit was \$428 million. When browsing the Weibo, college students will face the explosive flow of all kinds of epidemic related information, which will have a psychological impact. In this situation, college students will be in a stressful mood for a long time, and negative emotional states such as loneliness, anxiety, depression and fear will appear. College students pay attention to the increase and decrease of the national epidemic situation through Weibo every day, and agree with the state's timely adoption of the most stringent prevention and control measures. During the epidemic, due to more and more epidemic information on Weibo, understanding the current situation of the epidemic has become increasingly important. College students have always paid high attention to the information related to the epidemic. College students have high media literacy and reflect the surrounding behavior of actively participating in the epidemic prevention and control. College students show positive prosocial behavior and are active actors in the epidemic. Some college students will popularize knowledge about epidemic prevention and control to people around them, some college students will donate money and materials to people in need in various forms, and some college students will refute all kinds of online rumours they see. For the epidemic situation, actively disseminate scientific knowledge, actively promote positive energy and play a good role. Weibo still occupies an important position in the Chinese social media circle, and many users show their feelings and reflections on life, society and surrounding areas between the lines. With the development of the times, Weibo has become one of the important ways of social media. At the initial stage of the epidemic, the attitude fluctuated. As the epidemic in China has been controlled to a certain extent, many provinces have begun to gradually return to work and production. The overall attitude towards the "COVID-19" is positive and gradually stabilized in a positive mood. In the Weibo, "COVID-19" and "novel coronavirus" are highly concerned, as are "epidemic notification", "policy announcement", "prevention and control" and "virus" related to the epidemic.

2 Literature Review

As one of the most important headline social media platforms in China, many scholars have conducted research on user behaviors on Weibo. Junwen Xue's study qualitatively analysed the factors influencing persistent usage behaviors on Weibo from the perspective of its mobility characteristics, pointing out that prosocial interactions, entertainment needs, user satisfaction, perceived usefulness, media satisfaction, and user expectations play an important role in influencing persistent usage behavior [1]. Through regression analysis, Sheng Guojun found that perceived usefulness and user satisfaction had significant positive effects on college students' intention to use Weibo consistently and then on their consistent using behavior, and that needs of information and social interactions were important factors influencing users' perceived usefulness and satisfaction [2]. Combining use and satisfaction theory and Maslow's hierarchy of needs theory, Hou Min's study found out the relevance of the five influencing factors of information sharing and social interaction of college student on social media platform, including privacy protection, information acquisition, image enhancement, and pastime and entertainment decreases in order of relevance [3]. Meanwhile, research has also found that Weibo interactions are a useful supplement to real-life interactions [4].

In the context of Covid-19, offline socialization has become difficult and usage of social media has surged. According to the “Digital 2021 - October Global Statshot Report”, social media users have increased by more than 400 million (+9.9%) in the past 1 year, reaching 4.55 billion by October 2021. Covid-19 not only threatens people’s physical health, but also affects their mental health [5]. Patients with confirmed or suspected COVID-19 may be concerned about the consequences of their disease, and those in isolation may have emotions such as boredom, loneliness, and anger [6]. This period can also exacerbate stress levels due to the large amount of unfiltered information and more emotional ways of communication [7]. Research has also found an increase in cyber-bullying and a growing proliferation of negative sentiment on social media platforms [8]. On the other hand, a study has shown that support from parents, as well as self-disclosure on social media, can mitigate the negative emotions associated with the epidemic [9]. People’s feelings of loneliness can also be diminished through active participation in social media identity bubbles [10].

The “Weibo 2020 User Development Report” released by Sina Weibo Data Centre on March 12, 2021 shows that Weibo users are mainly the post-90s and post-00s group, accounting for up to 78%, while the age of China’s college students is generally between 18–25 years old. With 511 million users monthly active as of September 2020, the number of college student users should be significant [11]. At present, a very large proportion of college students have Weibo accounts [3], Weibo has basically entered the daily life of contemporary college students.

Most of the current studies focus on the behavior of Weibo users or the impact of the epidemic on the emotional aspects of social media users, but seldom involve the behavioural changes of Chinese college students in social media in the context of the epidemic. Therefore, this study is innovative and meaningful in studying the behavioural changes of Chinese college students on Weibo and analysing their influencing factors in the context of Covid-19. This research will provide theoretical support and direction guidance for the platform and relevant departments to correctly guide the use of microblog by college students during the epidemic.

3 Methodology

The research method used in this paper is the survey method in quantitative research. There are three reasons why the authors used the survey method as the research method for this paper. First, the results obtained by this method are easy to quantify. Secondly, this method saves time and manpower. Third, this method is easy to handle and analyse. However, this method still has disadvantages, such as the quality of the data cannot be guaranteed and the return rate of the questionnaire is low. The questionnaires were mainly in the form of multiple choice and Dichotomous scale.

The object of this survey was Chinese college students. The questionnaire was pushed through the WeChat and Weibo platform. Participants can participate in the survey voluntarily and can quit at any time during the survey. The questionnaire was collected from May 4, 2022 to May 13, 2022. A total of 122 questionnaires were returned, of which 98 were valid, with an effective rate of 80.33%. The invalid questionnaire was determined by whether the same option was selected for all questions. The authors

made observations by graphing the data and analysed the distribution pattern of the questionnaire answers.

4 Result

4.1 Sample Characteristics

Among the 98 valid samples, 78.57% were female ($N = 77$) and 21.43 male ($N = 21$). 4.08% of the participants were freshman ($N = 4$), 22.45% were sophomores ($N = 22$), 16.33% were juniors ($N = 16$), 50% were seniors ($N = 49$) and 7.14% were postgraduates ($N = 7$).

4.2 Browsing Content

In response to the most-viewed content, participants were allowed to select multiple options. Before the epidemic, people are most likely to search information on Weibo for major news events, with 71.43% of participants ($N = 70$) choosing this option, followed by daily life information with 60.20% of participants ($N = 59$) and celebrity information with 57.14% ($N = 56$). After the epidemic, major news events (81.63%; $N = 80$), daily life information (63.27%; $N = 62$) and funny content (45.92%; $N = 45$) accounted for the largest proportion. Among all these contents, celebrity information changed the most, dropping by 15.30%. While funny content, major news events and educational information saw the most significant increase by 7.14%, 10.20% and 14.28% respectively.

4.3 Time of Usage

43.88% of the sample ($N = 43$) reported an increase of time using on Weibo during the epidemic, and 56.12% ($N = 55$) showed no change. In the sample representing growth, the average usage time increased by 2.2 h.

4.4 Posting Behavior

Among the participants, only 40.82% ($N = 40$) indicated that the number of posts on Weibo increased compared to pre-epidemic. The main purposes of posting more contents were to express their own opinions (80%; $N = 32$), seeking empathy (67.5%; $N = 27$), coping with loneliness (40%; $N = 16$) and expressing dissatisfaction with life (40%; $N = 16$). Among the remaining 59.18% ($N = 58$) respondents, the reasons for the unchanged number of posts were that they didn't have the habit of posting at all (84.48%; $N = 49$) and that there was nothing to share (65.52%; $N = 38$).

4.5 Interaction Behaviors

60.20% participants (N = 59) expressed that they were more likely to comment on others' Weibo in the context of epidemic. The main reasons were as follows: sympathizing with bloggers (45.91%), overcoming anxiety and loneliness (32.65%), and questioning other users' personal opinions (21.44%). 55.10% (N = 54) indicated that they followed more users on Weibo. 63.27% (N = 62) showed an increase in the behavior of liking the other's blogs.

4.6 Participation in Online Community

57.14% (N = 56) indicated more participation in the Weibo community. Among these participants who expressed growth, 33.93% (N = 19) increased their use for the purpose of eliminating anxiety and other negative emotions caused by the epidemic, 67.86% (N = 38) for the purpose of seeking resonance with people with same hobbies, and 39.29% (N = 22) just for browsing some necessary content.

4.7 Irrational Behavior

82.65% of participants (N = 81) reported that their irrational behavior on the Internet became more frequent compared to the pre-epidemic period. These participants then were asked to select the reasons. According to their responses. The main reasons for more conflicts lie in verbal arguments due to different values or disagreement with others (81.48%; N = 66) and venting of negative emotions that accumulated during the epidemic (60.49%; N = 49).

5 Discussion

According to the results of the questionnaire, more than half of the respondents said that the time that they spent on Weibo had not increased during the epidemic. This result may be attributed to the fact that college students themselves were already active users of Weibo and had spent quite a long time on Weibo before the epidemic. In addition, there existed competitors of Weibo, such as WeChat (maintain close relationships) and TikTok (mainly intuitive short videos). These social media platforms filled the gap of needs of college students that the functions of Weibo could not meet, so the time spent on Weibo would be scattered. Finally, although college students were isolated at home after the epidemic, most colleges did not stop teaching activities (instead, colleges have switched to online distance teaching), which meant that college students did not have more leisure time to spend on Weibo. College students would also not increase the time uses on screens in their spare time because they already got tired of screens during the online distance learning.

The authors found that the contents that college students followed on Weibo changed during the epidemic. Before epidemic, college students tend to search for content of their interests in their daily lives on Weibo, such as news of entertainment and games. However, as the epidemic spread, college students were more concerned about news

about the epidemic and the epidemic prevention policies in their area, as they were one of the most sensitive groups to the outside world. After the epidemic contained, college students were generally more interested in funny videos that could make them relaxed, and they are more likely to retweet and like such information. The authors also found that since the college students were quarantined at home, the information they were most concerned about on Weibo was whether and when they would be able to return to school, especially for the graduates, who were eager to go back to school for the graduation ceremony. As a result, most of them would search for these kinds of information on Weibo. And since most exams were cancelled or postponed due to the epidemic, college students would often follow these exam-related information.

During the epidemic, college students' behaviors of subscribe, comment and like on Weibo have increased to varying degrees. At the same time, they also participate more in the community in Weibo. For posting blogs, a small percentage of respondents showed an increase in this domain. This may be due to the fact that some college students do not have the habit of posting blogs, or the content they prefer to post (like sharing their lives) could not be achieved properly during this period. But overall, college students became more active in using Weibo during the epidemic. The authors believe that the reasons for this result are as follows. Firstly, due to the restrictions of epidemic prevention and control regulations, college students were generally prevented from offline socialization activities, which meant that they were unable to derive emotional value from the original way of socializing. As a result, they tended to turn to the Internet to get their sense of identity. Secondly, Weibo community brings together a group of users who share a common interest in something or someone, giving them a space to share and discuss. It meant that it was easy to find like-minded people here, and thus easier to resonate with them and gain recognition. Finally, research has found that stronger involvement in social media community could alleviate loneliness and thus bring less psychological distress. Therefore, out of the need to relieve negative emotions, the active participation of college students in Weibo showed an increase during this period.

The authors found that during the epidemic, college students generally behaved irrationally to a greater or lesser extent. For example, they argued with others on Weibo, posted and retweeted offensive contents, or conveyed negative emotions on Weibo. According to the authors, there are several reasons for this phenomenon. First of all, due to the isolation, the number of Weibo users have greatly increased, the information that college students received from Weibo became more varied and complicated during the epidemic. On the one hand, opinions that were different or even opposite to one's own also increased on Weibo, which will inevitably lead to more disputes. On the other hand, the development of epidemic was uncertain, so the credibility of some relevant information is under question. The mix of real and fake information made people who were already isolated at home more irritable and aggressive, making it easier to cause conflicts between people. At the same time, under the context of epidemic, the content of major social media platforms became homogenized, and the information that college students received on Weibo were mostly that they had already seen on other social media platforms. This homogenized content not only causes aesthetic fatigue, but also makes people irritable.

6 Conclusion

To sum up, this study provides evidence for changes in behaviors of college students Weibo users in the context of COVID-19. Before the epidemic, Weibo played a complementary role in offline socializing. And during the epidemic, Weibo has become an important substitute for offline socializing among college students. The change of this status brings about changes in the use behavior of college students. The results of the study show that although the time spent by Chinese college students on Weibo do not significantly increase during this time, they are becoming more active on Weibo during the same period. Issues related to the development of the epidemic, or academic issues caused by the impact of the epidemic, have received the most attention. Fun content, an important tool for mood relief during this period, also gets more attention. The study also found that in the context of COVID-19, college students' behavior changes in using Weibo are mainly based on the need to obtain emotional needs lacking during this period due to the lack of offline activities and to relieve psychological distress. Irrational behaviors tend to be more prevalent during this period due to the negative emotions brought about by the epidemic and the surge of users and information on Weibo and other social media platform. The findings of the study assist platform stakeholders and policy makers to understand the changes in the use of social media platforms by Chinese college students during the COVID-19 pandemic, provide useful suggestions for the platform to more accurately push notifications according to users' preferences, and provide for the state to guide the correct use of Weibo and other social media by college students. Although this study is based on Chinese college students' performance on the microblogging platform. However, due to the similarity of their behavioral motivations, this result can also be extrapolated to other social media platforms that function similarly to Weibo. Future studies can continue to explore the universality of the results.

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