# Stress, Anticipatory Anxiety, and Mental Health Help-Seeking among Chinese Students in United States at the Beginning of COVID-19: A Thematic Analysis

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**Abstract.** The COVID-19 pandemic brought numerous negative effects towards people's mental health. The current study explored the influence of pandemic on Chinese international students in the U.S. at the beginning of the pandemic. Interview method was used in this study. Interview questions included the influence of pandemic, the influence of panic caused by pandemic, the influence of Asian-hates events, and mental health help-seeking behaviour. As the result, three main themes were narrowed down: stress, anticipatory anxiety, and help-seeking behaviour. The current study found that the most frequent stressor was the risk of infection. The other direct stressors were difficulty of traveling between China and the U.S., negative influence of academic life, and shortage of medical supplies. More indirect stressors were found: worries about Chinese students in the U.S. being infected by parents, worries about discrimination by parents, discriminating experiences of friends, and infection history of friends and of relatives in China. Three anticipatory anxieties were found: getting in touch with others, anti-Asian events, and different strategies to cope with disease. All participants reported no professional help-seeking behaviour. Five of eight participants reported the non-professional help-seeking. Three of eight participants reported they used self-regulation to cope with the stress and anxiety. The results demonstrated the unique experience and coping strategy of Chinese international students. Although they had lived in the U.S. for many years, their coping strategies still identified with Chinese culture. Future study could explore more associations of stress, anxiety, and help-seeking to understand and help Chinese international students better. This study can provide some guidance for future intervention studies and practices regarding the mental health situation of Chinese international students in other countries during the pandemic.

**Keywords:** COVID-19, Chinese International Students, Stress, Anxiety, Metal Health Help-Seeking.

## 1. Introduction

The COVID-19 pandemic attacked the whole world from the end of 2019. Meanwhile, the disease not only changed people's physical life, but the mental health had also been affected. Khodami and colleagues found that from the beginning of the pandemic, people's perceived stress had significantly increased [1]. Moreover, in the beginning of pandemic, anxiety evoked behaviours like buying toilet papers happened in the U.S. Im and colleagues believed that buying toilet papers was a coping strategy to against the pandemic. It means that people against the anxiety from pandemic through buying resources [2]. Besides the stress and anxiety, other negative emotion like depression became a challenge in pandemic.

Besides the panic caused by the disease, discrimination and hate towards Asian faces, which are based on the belief that COVID-19 was originated from China occurred as well. Yang et al. found that 53.97% in their sample reported that they have been treated unfairly when they study abroad, including physical assault, verbal assault, and the request to leave the public place [3]. Nam et al. suggested that many Chinese international students experienced discrimination due to media bias and stereotypes [4]. Besides the discrimination towards Asians, wearing mask had been discussed in the beginning of pandemic. Wearing mask to prevent people in pandemic became controversial. The government in the U.S. didn't promote wearing mask at the beginning of pandemic. People in the U.S. thought that wearing mask spread the panic at that time. In contrast, wearing mask was seen

normal in China. According to Ma and Zhan, Chinese students wear mask to prevent them from Covid-19, but it was considered different in the American culture [5]. Furthermore, Hu et al. 's research showed that the change of policies of transportation among countries led the Chinese international students and their families to be doubly excluded [6].

Under the high demand of negative emotion regulation, higher percentage of help-seeking behaviour was predicted. The percentage of Chinese college students who seek psychological help before the pandemic has been discussed in the previous study. Li et al. reported in their research that less than half of students who suffered from mental health problems searched for professional information online. Less than 20% of students had psychological counselling services. Only 2.8% of students asked hospital doctors for help [7]. Lu et al. found that Chinese international students who have a higher level of mental health arousal reported that the cost of counselling, transportation, the knowledge about psychological help, time limit, problems not serious enough to go for help, language problem, and lack of knowledge about mental health problem became the barriers to seek psychological help [8]. From this aspect, the current study will consider both psychological needs and behaviour of Chinese international students.

The current study focused on Chinese students who study in the U.S. This group was unique, as they receive two different cultural influences. Since they were far away from home, Chinese students were lack of family support. Pandemic brought difficulties in life for everyone. The new situation might increase both the depressive level and anxiety level. The current study focused on the factors of mental health concerns at the beginning of pandemic. Moreover, Chinese international students are a neglected group among the previous studies. COVID-19 pandemic brought huge variations in this group. The current study would explore the influence of pandemic on Chinese students who study in the U.S., including what they have experienced at that time and how they cope with the situation under the influences of the two different cultural factors (i.e., Chinese and American). This study can contribute to the understanding of the experiences of Chinese international students in another country during the beginning period of pandemic. It can provide some guidance to the design of psychological interventions for this group.

## 2. Method

### 2.1. Participants

A sample of eight Chinese students who studied in the U.S. were interviewed. The selection criterion included: (1) aged between 18-30 years, (2) already stayed in the U. S. for more than three years, (3) stayed in the U. S. between March,2020 and June,2020. Demographic information provided by participants was summarized in Table 1. A1, A2, A3, A4, A6, A7, A8 were stayed in a mid-sized city in central of the U.S. during March 2020 to June 2020. A5 was stayed in a larger city in west coast of the U.S. during March 2020 to June 2020.

### 2.2. Procedure

A purposive sampling procedure was used. The study interviewed ten Chinese students who studied in the U. S. Eight of ten met the inclusion criteria. Two participants who left U.S. at the beginning of pandemic were excluded. The interviews were done via video chat online and were transcribed. All participants gave consent to participate in the study.

### 2.3. Interview

The semi-structured interview guide was used to explore the participants' experiences when the pandemic began. The interview investigated participants' mental health situation and help-seeking behaviours. The interview mainly focused on five questions: (1) "How has your life been affected since the pandemic began?" (2) "What do you feel about the Asian hates?" (3) "For the panic brought by the Covid-19, tell us specifically if there is an event that you remember that has affected you." (4) "When your life is affected and some disturbances were caused, how do you cope with the challenges?"

(5) "Did you go for professional psychological for help? If yes, could you talk more about it? if not, why you did not choose to seek for professional mental health support to help you?" All participants were interviewed during March 2022 to May 2022.

### 2.4. Data Analysis

The current study analysed the interview transcripts by coding the emerging themes from the answers of the five main questions. First, the author coded the answers of five main questions individually. Overlapped codes were integrated together. All codes were defined with examples, and then they were narrowed down to three major themes. Second, the author independently re-grouped the answers based on the three major themes. Irrelevant answers were excluded and not discussed in this study. As a result, the codes are focused on the three major themes and could be easily distinguished from each other. Finally, another researcher examined the themes together with the author to exclude subjective distortion or errors. All the disagreements regarding the definition of codes were discussed and examined in detail. The definitions of the three major themes were also discussed. The codes under each major theme were further analysed and some answers were re-coded as a result.

Table 1. Demographic information of the participants

| No. | Age | Gender | Years stay in the U.S. | Major | Education |
|---|---|---|---|---|---|
| A1 | 24 | Female | 4 years | Psychology | Bachelor's degree |
| A2 | 26 | Male | 7 years | Mechanical Engineering | Master's degree |
| A3 | 26 | Male | 6 years | Mechanical Engineering | Bachelor's degree |
| A4 | 22 | Male | 5 years | Data Analysis | Undergraduate student |
| A5 | 25 | Female | 5 years | Environmental Management | Master's degree |
| A6 | 26 | Female | 5 years | Marketing | Bachelor's degree |
| A7 | 23 | Female | 8 years | Psychology | Graduated student |
| A8 | 26 | Female | 7 years | Psychology and Education | Bachelor's degree |

## 3. Results

After analysing the transcripts, three themes are concluded: (i) the stress they had at that time, (ii) the anticipatory anxiety they had experienced at that time, (iii) the help-seeking behaviour they did.

### 3.1 The Stress Sources

Participants reported several types of stress they experienced in the beginning of pandemic. These stresses could be divided to the direct stress and indirect stress. For the direct stress source, participants reported the risk of infection by Covid-19, the difficulty to travel back to China, the negative affect on their academic life and the shortage of medical supplies. Among the direct stress sources, seven of eight participants reported that because of the risk of infection and they had to reduce the social activity like hanging out with friends or having meal with friends. A2 reported that since the pandemic began, his social activity with friends reduced a lot. In this way, he felt that he became lazy and didn't want to go out either. A4 also reported that from March 2020 to June 2020 he was afraid to go to populated area or indoor place. Besides the risk of infection, the difficulty of travel between country is the second stress factor they talked about. With the number of diagnoses cases grew in the U.S., Chinese students considered to go back to China. Among all eight participants, four of them had graduated at that period. The difficulty of buying flight tickets and following the

entry policy made them more difficult to go back home. A5 reported that she had experienced several times that the flight was cancelled, she said:

"Because of the policy of travelling between the two countries, the flight was cancelled frequently at that time. Every time my flight was cancelled, I was so desperate and cried so much. As a result, I bought a very expensive flight ticket back to China."

A3, A4 and A7 also talked about the difficulties in their academic life. A3 said that the pandemic directly affected his plan of moving to and attending graduated school. A4 and A7 said that they had trouble to focus while having class online. Moreover, A1 also said that at the beginning of the pandemic, it was hard to buy the medical supplies like mask and hand sanitizer.

For the indirect stress sources, participants' response could be categorized to parents from China worrying them for getting disease. Parents from China worried about them for being discriminated. People around them had discriminated experience. People around them have been infected and been isolated and relatives in China infected the Covid-19. Two participants mentioned that their parents worried about them of being infected. Moreover, because of the social media reported the accident happened in the U. S. about Asian hates, participants also mentioned that their parents worried they were under the high risk of being attacked. A2 talked about that his girlfriend's experience in hospital:

"She was called "Corona" while she was working in the hospital, besides that, she also experienced the cold violence. She quitted that job eventually. I felt it hurt people who experienced frequently. I told her to quit the job and report the person who called her "corona". What we can do is limited but we still must do."

Moreover, A4 said that at the beginning of pandemic, one of his friends got Covid-19. After he was healed, his friends around him still didn't want to hang out with him. A4 said he felt sorry for his friend. A8 mentioned that one of her relatives got Covid-19 in China, because of he was elder, the disease took his life. A8 said from that, she learned that Covid-19 was a horrible disease.

### 3.2 Anticipatory Anxiety

According to Chua and colleagues, anticipatory anxiety is the negative arousal of things would happen in future, which means the negative response of afraid something will happen in future [9]. In the current study, anticipatory anxiety which participants reported could be divided to three types. The anxiety of getting in touch with other people, anxiety from the Asian hates' events and anxiety from the different way to deal with the disease between the U. S. and China. A1, A3 and A6 reported the anxiety of getting touch with other people, A6 said:

"I was a little sensitive at that time. it's more like I would feel nervous or afraid if a courier come to my apartment or other people who I don't know knock my door."

The anxiety from the "Asian hates" events means while at the beginning of pandemic, with the stigma of "Chinese virus", there were several accidents that someone would attack Asian people with no reason. A3 reported the worries from "Asian hates'" events. A5 mentioned that the Asian attacking events made her felt nervous and fear of the homeless people around her house. The anxiety from the different way to deal with the disease between the U. S. and China narrowed on masking. In China, people started to wear mask to prevent themselves from Covid-19, but wearing mask was not accepted by people in the U.S. at the beginning of pandemic. Only A3 mentioned this type of anxiety:

"From the beginning of the pandemic, people in U.S. held the different attitudes and thoughts about wearing mask. My girlfriend wore mask to class once, and her teacher and classmates looked at her in a strange way. I felt nervous when I went to supermarket with mask, as I felt that I might be attacked because of it."

### 3.3 Help-Seeking Behaviour

The current study asked about the help-seeking behavior of participants regarding following aspects: having help-seeking behavior, not having help-seeking behavior, and reasons why not choosing professional mental health support. It is worth mentioning that all eight participants didn't choose to seek professional psychological support. A1, A2, A7 and A8 said that they didn't think

they need the professional help. A5 and A6 said that they didn't think about getting the professional psychological help. A2 and A7 mentioned that they didn't know any professional psychological support. A2 and A3 said that they would feel vulnerable to talk about they need help to others, especially when they didn't have a good relationship with counsellor. A1, A2, A5, A6 and A7 said that they had went to their friends or parents to seek for help. The help here means the emotional support. A3, A4 and A8 said they chose the self-regulation when they had any negative feelings in the beginning of pandemic. Moreover, A8 reported that she didn't seek for help, but there were some emotional supports around her:

"I think that the teachers and classmates were friendly at that time. They knew I'm from Wuhan where the Covid-19 being found. They didn't have any discrimination action or words towards me. Moreover, they said the comments about "Chinese virus" should not exist from the beginning. They made me feel warm and safe."

## 4. Discussion

Overall, the current study found that many stress would affect Chinese students and led the anxiety, but less students would choose the professional psychological help. In the stress part, the risk of infection was the most frequently among the interviews. Another frequently stress source is the difficulty of travelling between countries. Moreover, participants also reported other direct stress: the negative affect on academic life, the shortage of medical supplies. Some indirect stresses were mentioned, parents who were in China worried about them of being infected, being treated unfairly or violented, friends around them being infected or treated unfairly and relatives being infected in China. Three kinds of anticipatory anxiety were concluded: the anxiety of getting in touch with others, anxiety of anti-Asian events and anxiety from different strategies of coping with epidemic between Chinese and Americans. None of participants reported the professional psychological help. Three of them talked they relieved the stress by self-regulation. Five of eight reported they went to parents or friends for mental support.

Seven of eight participants mentioned the risk of infection, which means the stress mostly came from the risk of infection in the U.S. for Chinese students. In the current study, the risk of infection could present by avoiding hanging out with friends, decreasing go out for meal, etc. It is possible that among different culture, the risk of infection with Covid-19 was appeared frequently for Chinese in pandemic. The risk of infection might be the significant stress for Chinese. To the mental health counselling service for Chinese students in the U.S., risk of infection could be considered as the mainly stress source. Other than the risk of infection, the difficulty to travel back to China was mentioned mostly. Cultural factor could also be considered in this stress. Chinese government decreased most international flight to control the epidemic. As the result, the ticket was more difficult to get with high price. More future study is needed about the difficulty of travelling between country. For the indirect stress, the current study could conclude them as the social media difference between China and the U.S. In the result, participants reported that their parents who lived in China worried about the difficulty they would face include the risk of infection and rick to be discriminated. Social media's difference could be the reason of this phenomenon. Future study could focus on how the social media difference drive the parents' concerns. Other than these stress, the difficulty in their academic life, the shortage of medical supplies, other people around them being infected or discriminated could also be considered the sources of stress.

For the anticipatory anxiety, the most frequently one is anxiety of getting in touch with others. The current study considered this could link with the risk of infection. According to Tsur and colleague, they found that in the network analysis of acute stress symptoms among Chinese, Swiss and Israeli group, Chinese group reported the highest centrality of "feeling alert to danger" [10]. The research finding is consistent with the current study. Moreover, the discrimination and hates events would directly or indirectly associate with anticipatory anxiety. Participants reported that they knew the hates events but it's far away from them. However, still several participants reported that the

discrimination events would increase their anxiety. Plus, participants who had people around them had experience would affect their anxiety. The current study assumed that the relationship between the discrimination experience and anxiety might be special for Chinses in the U.S., because the "Asian hates" and the saying of "Chinese virus" were unique for Chinese. According to Xiong and colleague, the international students who spent more years would be less likely to be affected by discrimination events [11]. Within the years stayed in the U.S. in the sample, this could explain that in the current study. The mental health support system could consider the uniqueness of stigmatization for Chinese in the process of counselling or therapy. Besides the discrimination and violence events, the different strategies between two cultures to cope Covid-19 led the anticipatory anxiety. The participant mentioned that wearing mask would lead him to worry that American thought he was sick. Chinese students had to wear mask to protect themselves, but in that same time, at the beginning of the pandemic, they were stigmatized. The conflict led the anticipatory anxiety. Ma and Zhan mentioned that mask wearing for Chinese students were stigmatized while the relationship between China and the U.S. became tight [5]. This could explain what the current study found.

The current study investigated the help-seeking behaviour. It is worth to mention that no one in the sample choose the professional psychological help. The lack of help-seeking behaviour still maintained low rate even during the pandemic when people were likely to have high stress. One of the participants reported that the relationship to the professionals was the key points of seeking for help. Moreover, the language problem occurs when considering the professional mental health help-seeking. Trusting the professional from another culture also plays an important role here. These ideas might be the reason that even under the high stress and pressure, Chinese students would not choose professional psychological help. She and colleague found that among public health workers, only 12.7% of 9475 reported the professional psychological help [12]. Another study from Liang and colleagues found that among 1159 older Chinese adults, less participants had the action of going to professional psychological help even when they had the suicidal ideation [13]. Combining with the result of current study, choosing to not go to professional psychological help might be the characteristic of Chinese people. For the Chinese students in the U.S., even they had years of experience soaked into American culture, the feature of help-seeking might remain as before. Future study could examine the cultural factor of the phenomenon. Besides going to the non-professional psychological help (friends or parents), self-care is another choice for Chinese students. Within the different cultural background, Chinese might prefer self-care or seeking the non-professional psychological help. Participants reported that they would not choose to "bother" others to solve their own problem. They would rather choose to solve the problem by themselves. As the idea before, even Chinese students had years of life in the U.S., the way they cope with mental health problem haven't changed. Luis and colleague found that self-care partially mediates the stress to well-being during the pandemic [14]. This could explain that some participants reported the self-care. Future research could focus on how Chinese international students cope with stress because they have experienced the different cultural background. Moreover, since Chinese less likely to choose professional psychological help, providing more information about better way of self-care towards Chinese might be more helpful.

## 5. Conclusion

The current study found that several factors could lead Chinese students to have stress in the early pandemic. The most common factor is the risk of infection. This stress source is particularly salient to Chinese people. Plus, the difficulty of travelling among countries brought stress as well. The mental health professionals could consider incorporating the major stressors of this special group into the intervention. Moreover, Chinese students experience anticipatory anxiety from getting in touch with other, discriminated events, and the different cultural habit to cope with the pandemic. Chinses students had trapped into the double bind of this situation. At the same time, they tend to choose nonprofessional psychological help. This result suggests that more diverse approaches for mental

health support are necessary for this group The limitation of the current study is the sample only included eight valid participants. Future research could investigate this issue in a larger sample. This study can contribute to the research and practices regarding mental health of international students during pandemic.

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