Empirical Article

Coping and Adjustment during COVID-19: Experiences of Chinese International Doctoral Students in the United States

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ABSTRACT

While the initial outbreak of COVID-19 in China impacted Chinese international students' families' lives, the spread of the virus in the U.S. heavily influenced their own. Drawing upon the stress and coping model (Lazarus & Folkman, 1984), this qualitative study unpacks Chinese doctoral students' experiences and coping at one large research university in the U.S. during the pandemic. The open-ended interviews with eight Chinese international doctoral students revealed the stressors associated with the sudden changes in participants' personal, social and academic lives. Findings showed that participants experienced learning obstacles, health concerns, funding uncertainties, and limited social interactions. Participants mainly utilized emotion-focused strategies to cope with the daily life stressors, the tense political climate and hate speech targeting Chinese people in the U.S. This study contributes to the dialogue about stress coping in the pandemic and suggests education practitioners possible improvements in student services.

Keywords: Chinese international students, doctoral students, stress coping, COVID-19

INTRODUCTION

The United States (U.S.) has seen a significant increase of Chinese students flocking to its colleges and universities with one out of three international students coming from China (Institute of International Education [IIE], 2020). In the 2019-2020 academic year, over 372,000 Chinese students were studying in the U.S. (IIE, 2020), positioning China as the top sending nation of international students to the U.S. for the sixth year in a row. Besides enriching host campuses and communities (Chavajay & Skowronek, 2008; Smith & Khawaja, 2011), international students also bring financial resources to a host nation. In 2019, Chinese students alone contributed $15.9 to the U.S. economy, indicating the broad benefits Chinese international students bring to the U.S.

Doctoral students who are more mature in age than undergraduate students are exposed to high stress levels and mental health concerns (Schmidt & Hansson, 2018; Sverdlik et al., 2018) as they conduct both academic work and research. Some doctoral students take on family responsibilities, adding another layer of stress to the already overwhelming academic work (Brown & Watson, 2010). Doctoral students also seek professional development opportunities (Pásztor & Wakeling, 2018), publish academic papers, present research at academic conferences, engage in teaching or other academic-related work (Gardner & Mendoza, 2010). Due to heavy academic workload, American College Health Association (2018) reported that graduate students are at a greater risk for mental health issues than the general population. Despite these challenges, the experiences of doctoral students are an understudied topic (Ye & Edwards, 2017) in the present literature. This study aims to advance the literature by unpacking the Chinese doctoral students' experiences in the U.S. during the COVID-19 pandemic.

COVID-19 became a global concern when the World Health Organization (WHO, 2020) declared a pandemic in March 2020. The pandemic has brought additional challenges to the lives of international students in general, and Chinese students in particular. Besides the sudden shift to online learning, sheltering in place, and travel restrictions, Chinese students in the U.S. also witnessed the anti-China rhetoric that blamed China and Chinese people for spreading the virus. Under the Trump administration, hate speech against people of Asian descent prompted the rise of stigmatization, racism, physical violence, and hate crimes across the U.S. (Gover et al., 2020). Yet, there is little knowledge about Chinese doctoral students' experiences during the pandemic while studying abroad. Given that Chinese international students represent the largest number of international students in the U.S., it is imperative to understand Chinese students' challenges and coping methods during a pandemic. Drawing upon the stress and coping model (Lazarus & Folkman, 1984), the purpose of this qualitative inquiry is to explore the experiences and coping of Chinese international doctoral students at one large Western research university in the U.S. This study also draws implications for institutional support that is crucial for this and other student populations in times of crisis.

In this study, we address two main questions: What are Chinese international doctoral students' experiences during the COVID-19 pandemic at one large American university? How do these students cope with stressors associated with the COVID-19 pandemic? Students' mental health is highly related to their academic success; mental health problems are negatively correlated with students' GPA and other educational performances (Eisenberg et al., 2009). Chinese international doctoral students face more challenges than most other populations in this time of crisis. Yet, their experiences and how they cope with stress during the pandemic are underreported. Thus, it is significant to explore how these stressors

from various sources impact Chinese international doctoral students' academic life and professional development so that higher education institutions can provide corresponding support to overcome this population's potential dropouts and academic failure.

LITERATURE REVIEW

Existing literature indicates that Chinese international students experience various stressors due to different culture, language, political and educational differences while studying abroad. Yet, most research focuses on college students in general. Thus, this paper sheds light on Chinese doctoral students, a more mature group that carries different types of responsibilities than undergraduate students, which is an understudied topic in extant literature.

Stress and Chinese International Students

Previous research has found that a greater cultural distance between the home and the host country causes greater challenges and higher stress levels among international students (Yeh & Inose, 2003; Ye, 2006). The U.S. and China exhibit fundamental differences in cultural practices, political ideology, education system, worldview, and language – factors can cause higher stress levels for Chinese international students in the U.S. (Lin & Betz, 2009). In addition, Chinese international students must switch from the mode of mostly remaining silent and listening to the teachers to the U.S. course structures that encourage students to speak up in front of the class. China emphasizes examinations and scores. Students' opportunity to speak up in class remains few since the teachers need time to cover as much knowledge as possible (Xu et al., 2018). In contrast, the U.S. emphasizes the overall development of students and encourages constructive interactions between the teachers and students in the class (Tanner, 2013). These differences require Chinese international students to make significant adjustments to the new learning environment in the U.S.

Most research to date has focused on the sociocultural adjustment of Chinese international students while studying abroad (Wang & Mallinckrodt, 2006; Wei et al., 2007; Ye, 2006). Extant literature suggests that while Chinese international students rely heavily on their family members and co-national peers for emotional support while overseas, this behavior may hinder their adjustment to life abroad (Yan & Berliner, 2011; Ye, 2006). For instance, Su and Harrison (2016) pointed out that forming a cluster of Chinese students on campus limited students' integration with peers from other backgrounds, which led to social self-efficacy difficulties, a factor that was found to negatively affect acculturation stress (Lin & Betz, 2009). Consequently, sticking to co-nationals may significantly increase depression among Chinese international students (Wei et al., 2007). In addition, "English proficiency, length of residence in the United States, and unconditional self-regard" (Lin & Betz, 2009, p. 451) can all impact Chinese students' social self-efficacy.

Regarding doctoral students, research found that Asian students typically sought social support from faculty, advisors, and fellow graduate students (Le & Gardner, 2010). Yet, there is little understanding about what factors and sources during the pandemic regulate doctoral students' lives. We know even less about Chinese international doctoral students' experiences in times of crisis. The sudden life changes that come with the pandemic may affect different aspects of their life. Compared to undergraduate students, graduate students take on more responsibilities such as teaching, research, and administrative tasks working as Graduate Teaching Assistants or Graduate Research Assistants (Gardner & Mendoza, 2010). With double shock from the pandemic, Chinese international doctoral students are

susceptible to various stressors while experiencing the pandemic in a culture and society different from their own. Thus, it is significant to look at these students' experience during the pandemic to explore how universities could better support them.

Stress and Pandemic

Extant research identified diverse stressors during infectious disease outbreaks, including fear, lack of access to resources, disruptions to work/learning, and daily self-care routines (Brooks et al., 2020; Main et al., 2011). For example, Cao et al. (2020) found that the economic shutdown lowered families' income and threatened job security, thus increasing some students' anxiety levels. Moreover, the long-lasting transmission of COVID-19, along with frequent lockdowns and travel bans, forced people to practice social distancing, which leads to a significant decrease in social interactions among friends and families and has added extra stress to those who are used to social gatherings (Usher et al., 2020).

Regarding academics, the sudden switch to online learning in Spring 2020 brought both teachers and students more challenges, such as technical issues that came with online learning (Adnan & Anwar, 2020). Following the campus shutdowns, the learning environment for students changed as they became confined to their rooms, which brought more difficulties since some students perceived "home as a source of distraction" (Son et al., 2020, p. 6) as they struggled to focus on academic work. Internet connections become a stressor since poor internet connectivity and technical issues severely impact student learning (Baloran, 2020).

Recent research found that college students' stress levels increased significantly during the COVID-19 pandemic (Baloran, 2020; Cao et al., 2020; Rogowska et al., 2020; Sustarsic & Zhang, 2021; Wang & Zhao, 2020). Yet, most of the studies cover college students in general. The literature review has revealed a lack of examination on Chinese graduate students' educational experiences in the U.S. during large-scale stressors, such as the global pandemic, and how these students cope with stress during this time. Instances such as labeling the COVID-19 as the "Chinese virus," and the increasing hate speech and crime targeting Chinese people and the broader Asian population in certain areas of the U.S. (Gover et al., 2020) triggered fear and anxiety among Chinese international students. In the global health crisis, it is vital to examine Chinese international students' experiences and wellbeing, especially at the doctoral level, as these students take on more responsibilities academically, professionally, socially, and individually, with stressors that can lead to mental health issues.

Stress Coping

In the last three decades, stress coping has caught attention from scholars across various disciplines ranging from social and behavioral science to medicine and public health. What most approaches have in common is the recognition of cognitive appraisal and behavioral responses that an individual resorts to in a stressful situation (Folkman & Moskowitz, 2004). In line with this, Folkman and Moskowitz (2004) define coping as "the thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful" (p. 745). Lazarus and Folkman (1984) developed a widely accepted model of stress and coping that refers to coping as a process of cognitive appraisal to determine whether an individual believes they have the resources to respond effectively to the challenges of a stressor. Coping assumes two major roles: problem-focused or active coping and emotion-focused or passive coping. When individuals cannot respond to the stressor, they likely turn to an emotion-focused coping like distancing, denial, or substance use. On the other hand, when individuals possess resources to manage or reduce the stressor, they are likely to develop a problem-focused approach. Examples include

problem-solving and planning (Folkman & Lazarus, 1988). In addition, high levels of emotion-focused coping have been associated with greater psychological distress and depressive symptoms. In contrast, high levels of problem-focused coping have been related to lower psychological distress (Compas et al., 2001).

Other conceptualizations of stress coping build on Lazarus and Folkman's (1988) model but shed more light on different strategies, such as meaning-focused coping (Park & Folkman, 1997), seeking social support (Amirkhan, 1990), and positive emotion coping (Folkman & Moskowitz, 2004). While most models employ quantitative tools to measure stress among various populations and contexts, narrative approaches present an important alternative to understand how people experience and cope with stressful events. Folkman and Moskowitz (2004) argue that "a great deal can be learned by asking people to provide narratives about stressful events, including what happened, the emotions they experienced, and what they thought and did as the situation unfolded" (p. 750), which can unpack various ways of coping that expand beyond the ones measured in existing inventories.

Regarding coping strategies of international students, extant literature has not come to the same conclusions. While some studies argue that international students use more emotion-focused coping, such as denial and behavioral disengagement, than domestic students (Chai, 2009), other studies found problem-focused coping as the most used approach, followed by social support and behavioral disengagement (Amponsah, 2010). The divergence in findings is due to various factors, such as gender (Sapranaviciute et al., 2011) and length of time in the host country (Mena et al., 1987). For this study, it is important to note that most of the research on stress coping comes from western samples, yet the effectiveness of different coping actions is often context-dependent (Lazarus & Folkman, 1984). In our study, the stress coping framework will serve as a lens to examine the coping of Chinese international doctoral students during a worldwide pandemic.

METHODS

This study explores the experiences of international doctoral students from Mainland China at a large Western research university in the U.S., utilizing a qualitative research approach with interviews (Creswell, 2013). We explore students' lived experiences during the COVID-19 pandemic, addressing two kinds of questions: what individuals have experienced and how they experienced it (Moustakas, 1994). We conducted open-ended interviews to unpack the experiences of Chinese doctoral students during the global pandemic. The theoretical framework guided the development of the interview questions in the research design period.

We asked our participants to reflect on their lived experiences from the Spring 2020 semester when the pandemic started throughout the Fall 2020 semester when the interviews took place. More specifically, the open-ended questions asked about students' experiences and coping related to their academic and personal lives to address our research questions:

- What are Chinese international doctoral students' experiences during the COVID-19 pandemic at one large American university?
- How do these students cope with stressors associated with the COVID-19 pandemic?

Data Collection

This paper draws on in-depth interviews with Chinese international doctoral students. The study occurred over a three-month period, starting in September 2020, when authors distributed a recruitment

announcement to various student clubs, associations, graduate student dormitories, and WeChat, a popular Chinese social media platform. Using a purposeful sampling method, we identified a diverse group of participants (Creswell & Poth, 2018) who were all full-time, continuing international students from Mainland China, currently pursuing doctoral degrees. All participants were physically present in the U.S. during the pandemic. None of the participants were compensated.

Following the Institutional Review Board (IRB) approval, we conducted one-on-one interviews with participants in Fall 2020. We audiotaped each interview that averaged 60 minutes in length. Due to the IRB COVID-19 guidelines, we conducted interviews via online video call platforms (Sturges & Hanrahan, 2004) such as WeChat and Zoom that allowed us to observe participants' body language and facial expressions (Salmons, 2012). All but two interviews were conducted in English. The first author conducted and transcribed the two interviews in Mandarin, followed by an English verbatim translation. The use of the native language may allow participants to feel more comfortable during the interview, and consequently, to share their experiences more openly as if they were to speak in a non-native language (van Nes et al., 2010).

We established trustworthiness through member checking (Creswell & Poth, 2018) by asking participants to confirm the accuracy and clarity of the interview data. We then coded the data to identify patterns and emerging themes both individually and across the interviews (Saldaña, 2016). We used a qualitative thematic analysis, a technique for identifying, analyzing, and reporting themes to interpret the data (Creswell, 2013). Both authors are international graduate students at the same university. We acknowledge that our personal biases and experiences may have influenced data collection and/or analysis.

Participants

In Fall 2020, 115 Chinese international students pursued graduate studies at this university, making China the top sending country of international students. As shown in Table 1, participants included eight students from China, who were all full-time doctoral students enrolled in various majors. Six students pursued degrees in the science fields, while two majored in social sciences. Participants varied in gender, age, and years in the program. There were four female and four male students. The participants' ages at the time of the interview ranged between 23 and 36, with a mean of 30 years old.

Academically, participants were at various stages in their academic journey. They studied in their programs for 2.5 years on average. Half of the participants had previously studied abroad, either in the U.S. or in other East Asian countries. Seven students held a part-time graduate assistantship that waived tuition fees, while one student lost their on-campus job due to the university's budget cuts in Spring 2020. Half of our participants resided in a student dorm, while the other half lived in private off-campus housing. To protect participants' privacy, we assigned them pseudonyms rather than using their real names.

Table 1: Participant Characteristics

Name	Gender	Age	Years in the program	Major	Housing
Chen	F	33	2.5	Communication and information science	Student dorm
Shu	F	33	3	Educational foundations	Student dorm
Yuxi	F	30	2.5	Communication and information science	Off-campus
Wenpei	F	23	1.5	Atmospheric science	Off-campus
Jun	M	36	5	Kinesiology	Off-campus
Da	M	34	1	East Asian Languages and Literature	Student dorm
Tianyu	M	27	1	Electrical engineering	Off-campus
Hanlin	M	27	4	Physics	Student dorm

Data Analysis

There were three phases involved in data coding using thematic analysis (Castleberry & Nolen, 2018). We used both inductive and deductive approaches. In the first phase, the researchers worked inductively and independently to draft initial open codes and later shared the codes to develop theoretical codes and analytic themes (Charmaz, 2006) based on the guidance of the theoretical framework. In the second phase, we worked independently to develop theoretical codes and analytic themes and later worked together to finalize the codes and themes that stemmed from the literature and the theoretical framework using a deductive approach. In the final phase, we worked collaboratively in writing up the findings and further developing our thinking.

FINDINGS

The data analysis revealed that the sudden changes in life, discrimination, and immigration policy changes during the pandemic triggered stress among our participants, and what is more, these life changes affected their mental health. Participants' responses indicated that mainly emotional coping strategies were used in response to the stressors. This section describes the four main themes that include academic challenges, political tensions and discrimination, health concerns, and stress coping.

Academic Challenges

The academic workload of doctoral students typically includes coursework, during the first 2–3 years, and a heavy research load. Since most of our participants were no longer taking a full course load, the shift from in-person to online learning did not present as many challenges as the changes to their work

that they performed as graduate assistants (i.e., teaching or research). Despite challenges that most college students can experience during a pandemic, such as online learning difficulties and lack of peer engagement, doctoral students have a couple of other unique challenges.

Compromised Academic Performance

Qualifying and comprehensive exams typically judge doctoral students' academic performance and progress. While these exams are inherently stressful, three students reported that the pandemic added to their stress levels. Chen and Shu ended up postponing comprehensive exams planned for Spring after consulting their academic advisors. Depression hindered one student's academic progress: "*My productivity is very low with the fear about the pandemic. I stopped working on my dissertation from June until today. I still have not done my comprehensive exam… All I want is to recover from the depressive and stressful memories that came from the changes during the pandemic*."

Research is the most important aspect of a doctoral student's academic work. For many participants, the pandemic directly or indirectly impacted their research. This was especially pronounced among science students who needed to work in a lab and those who planned for field research. For instance, Da, who is a linguistics student, could no longer perform his experiments. Hanlin and Chen had to cancel their field research abroad. Hanlin said: "*My plan was to go to Japan this Fall semester until next January, but now I cannot go*." Similarly, Chen's inability to travel for research "*almost terminated*" research that she had done so far. Most participants agreed that their graduation date would have to be pushed back for at least a year.

Financial uncertainties

Securing funding to continue their studies was an area of concern as all participants relied on graduate assistantships that waived tuition fees that are especially high for international students. Jun lost his on-campus job due to the university's budget cuts in Spring and was left without an income until Spring 2021, when he was planning to graduate. On the other hand, Chen was already searching for a new job because of the insecurity whether her contract would be extended for another year. She said:

> In terms of financial security, definitely there is always a fear. I got my contract at the last moment… At the beginning of the semester some professors in my program started to remind me that I need to look for [new job], that they cannot guarantee the same position next year.

Considering the high cost of living in the U.S. and this university's urban area, several students mentioned the possibility of returning to China, which would allow them to save money that they otherwise spend on housing and food. Hanlin claimed: "*At least for Chinese people, it is too expensive [to live here]. It is really a lot of money*." However, due to the travel bans, expensive flights to China, and graduate assistantships, participants decided to remain in the U.S. Other difficulties are similar to what other college students can experience during the pandemic.

Online learning and teaching experiences

While most students found online learning "*convenient*" and "*time-saving*," some participants expressed their concerns about sharing personal information in an online environment. Chen tried to limit what she shared in an online class as she explained:

> In Chinese culture you have to be very considerate in terms of what you say whether you are being monitored or not… Even though you probably really want to share something, but you do not want to lose face and you also want to show respect to the professors, and you want to fit in.

An online classroom environment may not allow for active participation and interaction between students and teachers. Students who were newer to the U.S., like Tianyu and Wenpei, noticed that their English proficiency dropped significantly. The campus used to be their only English-speaking environment. Wenpei shared:

> *The biggest change in social life is the decline of my English-speaking skills. This is a particularly interesting phenomenon because most Chinese people around me are like this… After moving out from the dorm, I hardly have any chance to talk to anyone during the pandemic. The people we met in life, including the landlord, were mainly Chinese. I only have one English-speaking time a week, which is the meeting time with my supervisor.*

Knowing that the COVID-19 seriously affected people's lives in China, switching classes online at the end of March came as a relief for the three students who worked as teaching assistants (TA) as they no longer need to worry about being contracted through face-to-face teaching. Yet, to provide quality online learning, TAs faced new challenges, as shared by Shu: "*I had to do more work to prepare for a class. I pretty much self-studied everything about teaching, about how to manage a class, about how to engage students in an online setting.*" Likewise, Yuxi spent all summer learning about online technology. She felt frustrated noticing that some professors "*did not do the same.*" Several others expressed that professors' lack of online teaching skills led to overall lower quality of learning.

A lack of peer engagement

The academic journey of doctoral students who often spend lots of time working on their research can become a lonely one even without the pandemic. For this, students referred to peer support as being crucial for academic growth and development. Yuxi explained:

> *As a graduate student, one of the very important things is when we meet with each other in the corridor and have informal discussions on what we are working on… There is a lack of social space. I feel strongly disconnected from my peers, what they are working on, what is going on in their lives.*

Hanlin thought that the lack of interaction with peers "*can affect the motivation of individuals*" academically.

The absence of regular communication with academic advisors was another big theme that emerged from the interviews. Chen recounted: "*Before COVID-19, I would just go to his [advisor's] office, and we would just sit next to each other, and he would show me certain things.*" Moreover, participants stressed that they rarely reached out to their advisors by email, as per Jun: "*I mainly just talk to her [advisor] about my dissertation. But other than that, I do not want to bother them. They are busy; they have a lot of students.*"

Besides research, doctoral students often engage in professional development opportunities to increase their chances of being hired in academia or industry after obtaining a degree. Doctoral students also attend academic conferences allowing them to make connections with other scholars in the field. Students like Da felt like missing out on these opportunities would have negative consequences:

> *You can meet a lot of people and you can also share your ideas with other people. If the conference got cancelled, you cannot talk to them, you cannot share with them, and you cannot meet people. It will definitely affect academic development.*

Political Tensions and Discrimination

Participants reported that the immigration rhetoric and policies on international student status under the Trump administration brought additional stress during the pandemic. Despite the summer 2020 U.S. Immigration and Customs Enforcement proclamation (2020) concerned all international students, a series of limitations and suspensions were imposed on students from China throughout the year 2020. Tianyu, who majored in electrical engineering, shared his concern:

> *I hold a one-year visa because my major is a sensitive subject. I originally planned to return to China to renew my visa after finishing my qualifying exam. But now I cannot go back because I do not know what the new visa policy is. I feel that Americans are very xenophobic now.*

Besides the uncertainties about immigration policies that may affect Chinese students' visa status, most participants felt discriminated against when the U.S. President Trump labeled the COVID-19 as the "*Chinese virus.*" Shu referred to the "*broken window effect*" when political rhetoric enables the public "*to discriminate against Chinese people publicly.*" Participants also witnessed hate speech on social media platforms. Wenpei shared:

> *For some time, I did not dare to view social media like Twitter. Because I was sad to see hate speech towards Chinese people. It was already too hard for me when my mother and brother contracted the virus. I can no longer handle any discrimination from the public.*

One student experienced discrimination personally at the onset of the pandemic, saying that some people "*misunderstood the difference between the person and the country.*" Students noted that despite being aware of the health risk in January 2020, they tried "*to fit in*" American society to avoid discrimination, as explained by Shu:

> *I know the cultural difference between China and the U.S. If I wear a mask on campus, American people will look at me differently since they will consider I got sick. So even though I wanted to wear it, I could not.*

Looking ahead, participants felt anxious about the wellbeing of Chinese students in the U.S. The political dynamics surrounding the pandemic, and Chinese international students in particular, made students question whether the U.S. is still a desirable study abroad destination.

Health Concerns

Since the Covid-19's discovery in Wuhan province in China, Chinese students became aware of the situation as early as January 2020. They kept abreast with the lockdown in China through social media. Da commented: "*When I saw the news and saw the lockdown, all the images, all the videos, everybody got really depressed… All my relatives talked to me about it. So mentally, I was pretty nervous.*" During this time, students' stress levels increased as they began to worry about their families. Shu said: "*My dad was working at the front line… I got really stressed because I worried about his health.*"

Wenpei's family members in Wuhan contracted COVID-19. The stress from worrying about her mother and brother's health pushed her into depression. She explained:

> *We are far away from home and when family members get sick, I feel guilty because I cannot help anything. At that time, everyone told me that you were lucky and did not go back during winter vacation. I felt very uncomfortable when I heard this because I would rather be the one to get contracted.*

Following the outbreak of COVID-19 in the U.S. in March 2020, participants began worrying about their own health. Their parents felt upset about the poor handling of the pandemic in the U.S. as

they worried about their children's wellbeing. Tianyu said: "*Both my parents and I had regretted allowing me to study abroad in the U.S.*" Most students reduced the frequency of grocery shopping to once a month, such as Yuxi:

> *Every time I go, I stock a lot of food. I do not have a car. I had to carry a lot of heavy stuff. Life suddenly became harder… I find it challenging to have enough ingredients in my refrigerator to feed myself.*

Being confined to indoor places, several students shared concerns about food insecurity.

Social Isolation

Socially, participants isolated themselves to reduce the risk of infection. For students who lived in a dorm, sharing common areas became an issue. Chen experienced "*loneliness, isolation, and the fear of meeting in this shared environment.*" Due to a higher risk of contracting the virus, Shu moved out of a dorm to her friends' house as she recounted:

> *I felt really stressed out because I could not get used to their lifestyle… I could not go out because my friends were concerned about where I go and whether I would bring the virus back…*
>
> That situation was super uncomfortable. There were a few times I got really frustrated and cried.

After two months of living without freedom, Shu felt depressed and decided to move back to the dorm. Even though she considered it as a place with a higher risk of infection, she determined moving back would benefit her mental state at the time.

As a result of confinement to indoor places, most students realized that the pandemic had taken its toll on their physical and mental health. For Tianyu, not being able to balance study, work, and social life was a big challenge that could potentially lead to termination of his studies. He explained: "*If it [the pandemic] lasts for another six months, I might consider returning to China. I can bear it for one or two years. If it goes beyond that, I will not be able to handle it.*"

Stress Coping

The interviews revealed that all participants used more emotion-focused than problem-focused coping strategies. Most students talked to their parents more often to relieve their stress levels. Hanlin commented:

> *I talk to my family not only to express my feelings, but more so to let them not worry too much about me. Because I am the only child, it might give them some uncertainty if I do not contact them for a while.*

Students also used negative coping strategies such as avoidance. Most stated that they intentionally blocked social media. Commenting on the negative opinions that fly around on social media platforms, Chen said: "*I will tell everybody, leave social media! … I purposefully created a safe environment for myself to keep the distance from the news.*" One important finding is that most Chinese international students expressed that they would not reveal negative feelings when talking with their families because they did not want them to worry. Some students even tried to cover up parts of the truth by not sharing about their stress, as per Tianyu: "*I did not really want to tell them the truth because it would only make them more worried. So, I told them it was fine here. But the U.S. is, in fact, not doing well in controlling the pandemic. I am so upset about this.*" Similarly, Chen said:

> *I do not want to increase the anxiety for them. That is why most of the time I will show them that I am eating well… There are nice things to show them and it is a way to make them feel relieved, it is a way to make them feel that I am in a safe environment.*

As for the student whose relatives died from the COVID-19 virus, she pretended to stay "*strong and optimistic*" when talking to her mother on the phone. She recounted: "*I cried a lot. But I did not cry when talking with my family on the phone. They would feel sad if they hear me. So, after hanging up the phone, I cried aloud.*" Without a proper way to manage stress, two students resorted to alcohol to release pressure for some time.

As for problem-focused coping, some students developed new hobbies to balance their life during the pandemic. Female students tend to build hobbies such as getting close to nature and cooking. Male students more frequently took on sport activities that did not require gathering to release the pressure from academic work. Due to the social distancing restrictions, two male students stated that they would take on individual sports like surfing.

DISCUSSION

Part of our findings on Chinese international doctoral students' experiences during the COVID-19 pandemic correspond with the extant literature studying the broad experiences of international students in the U.S. For instance, our participants experienced learning obstacles when school switched to an online system of learning (Adnan & Anwar, 2020; Son et al., 2020); health concerns during the pandemic (Rogowska et al., 2020); funding uncertainties (Cao et al., 2020), and limited social interactions (Usher et al., 2020). In addition, participants have utilized mainly emotion-focused coping strategies identified by Lazarus and Folkman (1984) to deal with these stressors.

The present study adds knowledge to our understanding of Chinese international doctoral students' unique experiences during the pandemic. First, the Chinese international students experienced a double shock in the pandemic. On one side, participants worried about their beloved ones in China during the first national lockdown in January 2020. Yet, their stress levels escalated when the WHO (2020) announced a global pandemic in March 2020. At this time, they had to worry not only about their families in China but also about their own health. The Chinese international students experienced prolonged stress levels that, in many cases, developed into depression. Utilizing emotion-focused coping, the most common coping strategy, their communication with families increased as they sought emotional support in a time of crisis. Despite having a hierarchic relationship with supervisors, in line with the Confucian view of the student-teacher relationship, some Chinese students expect to develop emotional bonds and professional closeness with their teachers (McClure, 2005). Some of the participants shared about their academic struggles with their academic advisors. This behavior illustrates the importance of a positive student-advisor relationship building for Chinese doctoral students who sought advisors' support during the pandemic.

In addition to the academic, personal, and social difficulties that emerged during the pandemic, our findings reveal that the way host governments manage the crisis can also affect students' stress levels. These findings are in alignment with existing literature. For instance, students' anxiety and stress levels were comparatively higher in a country that emphasizes individualism, Poland, compared to students in a collectivist society, such as China, because the "lack of controllability caused by COVID-19 may be perceived as more dangerous among people from individualistic countries" (Rogowska et al., 2020, p. 805). Likewise, the U.S. has been facing a historic challenge in controlling the spread of the COVID-19 virus (Miller et al., 2020) when many people request liberal rights and refuse to wear a mask in public. Encountering such individualistic culture raised additional health concerns among Chinese students.

Another dimension unique to Chinese students' experiences rests in political tensions between the U.S. and China. One of them was the trade war that was amplified during the pandemic. In the presidential document (Proclamation 10043 of May 29, 2020) titled *Suspension of Entry as Nonimmigrants of Certain Students and Researchers from the People's Republic of China*, this paragraph targets Chinese international graduate students in the U.S.:

> The PRC authorities use some Chinese students, mostly post-graduate students and post-doctorate researchers, to operate as non-traditional collectors of intellectual property. Thus, students or researchers from the PRC studying or researching beyond the undergraduate level who are or have been associated with the PLA are at high risk of being exploited or co-opted by the PRC authorities and provide particular cause for concern (Proclamation 10043 of May 29, 2020).

Besides this proclamation that already directly affected Chinese students in "sensitive subject areas," most participants expressed that discrimination and violence against Chinese people in the U.S., raised major concerns. Even if not personally experienced by the participants, the instances of discrimination coming from top U.S. officials made participants question whether they want to continue with the pursuit of education in the U.S. In line with this, previous research found that discrimination negatively related to international students' sense of belonging (Glass & Westmont, 2014) and mental health (Wei et al., 2007). In this context, participants resorted to emotional coping, such as social media avoidance as participants conceived these online platforms full of negative opinions toward Chinese people. Importantly, among the Chinese international students we interviewed, none actively sought support from campus counseling services. This phenomenon follows existing literature arguing that the utility rate of counseling services among Chinese international students remains low compared to domestic students (Ching et al., 2017). There is a reason behind this phenomenon. School counseling remains an underdeveloped area in China; seeking counseling is generally seen as a stigma that discourages students from pursuing it (Shi, 2018). Rather than seeking institutional support, most participants utilized forbearance coping, defined as minimizing or concealment of problems or concerns to maintain social harmony and not trouble others, a coping strategy prevalent in collectivist cultures (Moore & Constantine, 2005). The positive side of the avoidant behavior is that it eliminates potential conflicts among those engaged. Instead, participants chose a peaceful way of avoiding social media rather than arguing with anonymous netizens to create larger conflict. Yet, the negative side is that the participants handled the negative opinions they encountered by themselves, which can generate mental health issues.

CONCLUSION

This study unpacked the Chinese doctoral students' experiences at one American university during the COVID-19 pandemic. An overall finding of this study is that the stressors for Chinese international doctoral students during the pandemic came from the sudden changes in personal, social and academic life, as well as misunderstandings among people in the host society, discrimination, and political tensions between the U.S. and Chinese governments. Understanding this group of students' experiences, including their stressors and stress coping strategies, sheds light on the institutional adjustment and support to better facilitate students' academic performance and an overall wellbeing during and after the pandemic. While there is no one panacea for removing the stressors, this research also provides valuable insights for

educators about the cultural aspects that they need to be aware of in further accommodating this growing international student population in the U.S.

The implications of this study suggest that educational practitioners should promote the advantage of using university's counseling services available to international students free of charge. Culturally, Chinese international students choose not to speak up when facing discrimination and racism, and as per our study's findings, they tend to resort to emotion-focused coping such as avoidance and family support (Folkman & Moskowitz, 2004). Thus, it is of utmost importance to approach these student populations with cultural sensitivity when promoting counseling services to them. One of the ways to engage Chinese and other Asian students in conversation about their experiences abroad, and especially in times of crisis, would be in offering counseling and mentoring services in their native languages, or by the people who are culturally trained to respond to the needs of Asian students. While the stigma can take time to break, developing a more targeted approach to counseling Chinese and other Asian students would benefit the well-being of the biggest international student population in the U.S.

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