

The Impact of the COVID-19 Pandemic, Perceived Stress, and Self-Regulation of Chinese International Students

Siu-Man Raymond Ting

Zhiqi Liu

North Carolina State University, USA

ABSTRACT

In this study, we explore the perceived stress and self-regulation of four Chinese international students (CISs) at a public research university in the southeastern United States (U.S.) during the COVID-19 pandemic through individual semi-structured interviews. The identified themes include travel restrictions and delayed required tests, mixed experiences after arrival, differences in education systems, inadequate English preparation and performance, cultural and living adjustments, and limited self-care and coping strategies. The implications of these findings emphasize the importance of self-regulation, a deeper understanding of the challenges faced by international students, and considerations for related policy and practice, as well as directions for future research.

Keywords: international students, COVID-19, perceived stress, self-regulation, student adjustment.

The continued growth of international students not only internationalizes higher education institutions but also has a significant positive economic impact on the U.S. (Abdullah et al., 2013; IIE, 2023). Due to the impacts of COVID-19, in 2020–2021, 914,095 international students were pursuing higher education in the U.S., representing a 15% decrease from the previous academic year (IIE, 2023). Although the quarantine policy for COVID-19 was lifted in many countries after 2021, total enrollment in 2022/2023 was 1,057,188, increasing by 11.5% from the previous year—yet this number remained below pre-pandemic levels (IIE, 2023). Additionally, international students contributed \$33.8 billion in revenue to the U.S. economy through tuition and living expenses in 2021–2022, reflecting a 33% decrease from the pre-pandemic figure of 45 billion in 2018 (IIE, n.d.; NAFSA, 2022).

The presence of international students in the U.S. not only contributes to the economy but also enriches academic and cultural experiences within higher education institutions and local communities (NAFSA, 2022). However, the COVID-19 pandemic has introduced unique challenges for international students (Zhai & Du, 2020), including feelings of isolation, reduced engagement, difficulties in maintaining connections with their home country, and experiences of discrimination (Kerr, 2022; Maleku et al., 2021; Song et al., 2021). These challenges can significantly impact the self-regulation of international students, affecting their academic and personal performance in the U.S.

LITERATURE REVIEW

The substantial and, in some cases, irreversible effects of the COVID-19 pandemic on students underscore the importance of researching mental health issues among international students during this time (Zhang, 2022). Research has indicated that self-regulation significantly influences students' psychological well-being and related outcomes prior to the COVID-19 pandemic (Balkis & Duru, 2016; Chen & Lin, 2020; Mattern & Bauer, 2014; Singh & Sharma, 2018). However, there has been limited research on how COVID-19-related stress affects student self-regulation. Given that Chinese students constitute 27.4% of the U.S. international student population in 2022/2023 (IIE, 2023) and their substantial cultural and economic impact on American higher education institutions, understanding the experiences of this demographic is particularly crucial. Chinese international students (CISs) face unique challenges exacerbated by cultural and linguistic differences, as well as sociopolitical tensions between China and the U.S., making their experiences indicative of broader issues among international students during the COVID-19 pandemic. Therefore, this study aims to analyze these specific challenges and examine the relationship between stress and self-regulation among CISs in the U.S. during the pandemic.

Adjusting to Life in the U.S.

Adjusting to life in the U.S. presents significant challenges for CIS, particularly with respect to academic performance and acculturation, even before the COVID-19 pandemic (King & Bailey, 2021). Many CISs studying in the U.S. represent their first exposure to American culture. They often embark on this journey alone, lacking immediate family support, established community networks, or long-standing peer relationships (Chai et al. 2020; Lorenzetti et al., 2023). This isolation can exacerbate the difficulties they face, as they lack familiar support systems that provide emotional comfort and practical assistance during stressful times (Lorenzetti et al., 2023). Consequently, the CIS must navigate the dual challenge of excelling academically in unfamiliar higher education institutions while coping with loneliness and cultural disorientation, all without the benefit of established support structures and while trying to build new social connections in an unfamiliar environment.

Recent research has further illuminated these challenges. Huang et al. (2024) examined the difficulties encountered by students placed on academic probation during their first year of college. The study revealed that these students struggled with adapting to new daily routines, managing reduced adult supervision, overcoming inadequate high school preparation focused mainly on test scores, and coping with limited involvement in the college application process (Huang et al., 2024). Additionally, since English is often a second language for international students, proficiency in English is crucial for their success in completing their degrees in an English-speaking country (Li et al., 2010).

Moreover, previous research highlights the importance of academic integration for success. Rienties et al. (2011) reported that academic integration has a positive effect on academic performance. Interestingly, while non-Western and Western international students exhibited similar study performances, those from non-Western backgrounds were found to be less integrated than their Western counterparts were (Rienties et al., 2011). This finding underscores the complex relationships among cultural background, integration, and academic success for international students.

Although studying abroad benefits language acquisition, cultural integration, and enhanced competitiveness in the job market, it also involves challenges due to the culturally different environments (Cao et al., 2017). Presbitero (2016) examined international students' cultural intelligence in relation to culture shock and reported that culture shock was significantly but negatively related to psychological and sociocultural adaptation. Higher levels of cultural intelligence that international students achieve are associated with less impact of psychological and social adjustment on adapting to different cultures (Presbitero, 2016). Additionally, Yuan et al. (2024) reported that cultural empathy and advice satisfaction significantly influence international students' sense of belonging in U.S. institutions, whereas advisor-advisee rapport does not. Their study emphasized the importance of cultural empathy in helping international students feel connected and supported, thereby improving their overall sense of belonging and aiding their adjustment process.

Challenges during the COVID-19 Pandemic

The COVID-19 pandemic has exacerbated the challenges faced by international students. First, COVID-19-related policies and social, political, and historical contexts have led to increased discrimination (e.g., “Xenophobia” and “Sinophobia”) against international students. For example, former president Donald Trump’s frequent reference to COVID-19 as the “Chinese virus” or “China virus” contributed to the unfair treatment of Asian international students, particularly those from China, who were unfairly perceived as potential carriers of the virus (Fallows, 2020). This misconception has heightened the discrimination faced by these students. (Zhao, 2020). Zhang et al. (2023) investigated the relationship between perceived discrimination and self-reported overall health among international students and reported that higher levels of perceived discrimination during the pandemic were linked to lower levels of

positive emotions and perceived social support (Zhang et al., 2023). Consequently, approximately 37.5% of 261 Chinese international student respondents reported moderate to severe posttraumatic stress disorder (PTSD) symptoms (Song et al., 2021).

COVID-19-Related Factors Affecting Mental Health

COVID-19-related factors such as isolation, a lack of campus services, policy regulations, depression, anxiety, and uncertainty have significantly impacted the mental health of Chinese international students (CIS), leading to increased psychological distress (Fischer & Whatley, n.d.; Kerr, 2022; Maleku et al., 2021; Serafini et al., 2020; Song et al., 2021; Xiong et al., 2022). The abrupt shift to remote learning has further distanced students from their campus communities, exacerbating these issues. Interestingly, Paul et al. (2023) reported that international students demonstrated stronger beliefs in adaptability, malleability, and better mental health than domestic students did during the pandemic. However, this study had a small sample size ($n=98$) and a modest effect size (7% variance explained). Despite these findings, there remains a critical need to explore the complex relationships among the COVID-19 pandemic, perceived stress, and self-regulation. Mental health was found to mediate the relationship between international student status and involvement (Paul et al., 2023), underscoring the importance of considering both perceived stress and self-regulation strategies in understanding and supporting student well-being during crises.

Perceived Stress and Self-Regulation

Self-regulation is a learning process involving goal-directed behavior that enables individuals to delay gratification in the short term to achieve desired outcomes in the future (Carey et al., 2004; Chen & Lin, 2020; Etkin, 2018). The goal of studying self-regulation among students is to equip them with tools to maintain focus, calmness, and alertness, thereby enhancing their psychological well-being (Etkin, 2018). Research has shown that self-regulation directly affects academic stress, with a negative and significant relationship (Arabzadeh et al., 2012). While investigations have investigated the connections between stress and self-regulation (Brock, 2016; Chen & Lin, 2020), few studies have focused specifically on the impact of COVID-19-related stress on self-regulation.

Cultural factors also play a significant role in shaping attitudes toward self-regulation. In Chinese culture, parental attitudes and practices significantly influence students' social and academic adjustment. Academic achievement is highly valued for future economic security and family honor (Luo et al., 2013). Authoritarian parenting, which involves setting strict guidelines and emphasizing obedience and respect, can place substantial pressure on students even after they enter college. Research indicates that authoritarian parenting is associated with greater learning problems and negatively impacts self-regulation (Pinquart, 2016; Shen et al., 2018). Consequently, authoritarian parenting may contribute to

challenges faced by international Chinese students, potentially impeding their academic motivation and achievement.

Miller and Brown (1991) developed the 63-item Self-Regulation Questionnaire (SSRQ) to measure various aspects of self-regulation. Chen and Lin (2018) validated this tool with a sample of 1,998 college students in Taiwan and adapted it into the TSSRQ, a 22-item version with five factors: goal attainment (GA, seven items), mindfulness (MF, seven items), adjustment (AD, three items), proactiveness (PA, three items), and goal setting (GS, two items). These five factors explained 54% of the total variance in self-regulation.

The Study

The current study investigated the impacts of COVID-19 and adjustments on Chinese international students (CIS). The research questions were as follows:

1. How did COVID-19 impact the adjustment of international Chinese students?
2. How did the CIS adjust to a new campus during the COVID-19 pandemic?

METHOD

We used a qualitative multiple-case study (Creswell, 2014). This approach examines multiple cases to identify patterns or make comparisons (Creswell, 2014). After the approval of the Institutional Review Board, the first author contacted an Intensive English Program (IEP) at a public major research university in the southeastern U.S. There were approximately thirty students in the program. Volunteers from this program participated in the study and completed the consent form. In November 2022, the second author conducted individual, semi-structured interviews at the program office. The interviews were audio recorded, transcribed by the second author, and subsequently analyzed collaboratively by the authors.

Participants

There were four participants in the study. Their profiles are summarized below with pseudonyms:

Rose

An 18-year-old female was from a northern province of mainland China with an interest in computer science. She was enrolled in the Intensive English Program (IEP) and arrived on campus in August 2022 after graduating from a public high school. Rose described herself as independent and curious about new experiences.

Billy

A 19-year-old male was also interested in computer science. He came from a southwestern province of mainland China and had been on campus for three

months at the time of the interview. Before arriving, Billy attended a bilingual international high school (Chinese and English) in China.

Xiao

A 20-year-old male pursued a major in soil science and crops, he was a volunteer assistant at the IEP. He arrived in the U.S. a year ago and recently transferred to this university. Xiao described himself as dedicated to his studies and expressed enjoyment in living here.

Yan

An 18-year-old male with an interest in mathematics. Yan described himself as an introvert but optimistic. He began attending the IEP in the fall and previously studied at a bilingual international high school in China. He came from a province on the east coast of China.

Data Analysis

We utilized Creswell's (2014) qualitative case methodology to analyze the data. The process began with organizing and preparing the raw data, which included verbatim transcripts from the interviews. We then read through all the data, coded it manually, and developed categories and themes on the basis of the codes. The final step involved interpreting the meanings of these themes and descriptions.

In the coding process, we adhered to Tesch's (1990) eight-step framework. Each of the four cases was reviewed by two authors following these steps:

1. Get a Sense of the Whole Data: Each author read the transcriptions of their assigned cases and made initial notes.
2. Pick One Interview: An in-depth review of one interview was conducted to generate preliminary insights.
3. Review More Interviews: Additional interviews were reviewed to compile a comprehensive list of topics.
4. Abbreviation of Topics as Codes: Topics were condensed into codes.
5. Development of Categories from Topics: Codes were organized into categories.
6. Abbreviation for Each Category: Categories were further abbreviated.
7. Assemble Data Material by Category: Data were organized according to each category.
8. Recode Data as Necessary: Existing data are recoded if needed.

Initially, each author reviewed the transcriptions for two cases, taking detailed notes. They then focused on one case to identify key themes by asking questions such as "What is this about?" and examining the underlying meaning of the information. Notes were compiled into a list of topics, which were subsequently grouped into similar categories. These categories were abbreviated into codes, which were then annotated next to relevant text segments.

The authors convened to discuss their notes, compare ideas, and conduct member checking to minimize individual subjectivity. After agreeing on the

preliminary codes and categories, each author independently reviewed and coded the second case, following the same steps.

Upon completion of the analysis for all cases, the authors met to review and finalize the categories and codes. Initially, fifteen categories/themes were identified, which were then refined and consolidated into eight main categories/themes. The final step involved making definitive decisions on the abbreviations for each category/theme and arranging them into codes. The coding process facilitated the generation of a comprehensive description of the respondents and categories/themes.

Trustworthiness and Credibility

To ensure trustworthiness and credibility in their qualitative research, the authors followed Gibbs's (2007) recommendations for team research reliability procedures. Initially, the second author transcribed the interviews. The first author then reviewed the transcripts to verify their accuracy and correct any transcription errors. Following this, the authors convened to discuss their coding processes. This meeting allowed them to review definitions of codes, discuss any disagreements, and adjust the wording or codes as needed. By comparing individual analyses and reviewing meeting notes, including cross-checking topics and codes developed independently by each author, the authors enhanced the validity of their data analysis.

The authors also addressed potential biases in the research findings (Creswell, 2014). Both authors are Chinese: one from the Hong Kong Special Administrative Region and the other from mainland China. Throughout the data analysis, they engaged in self-reflection to ensure an open and honest narrative. During meetings, they discussed how their backgrounds—such as gender, race, culture, traditions, socioeconomic status, and personal perspectives—shaped their interpretations of the findings. This reflective process helps mitigate subjectivity and bias.

Additionally, the authors employed a rich, thick description to present their findings, enhancing the validity of their results (Creswell, 2014). They provided detailed descriptions and interpretations of the setting and the unique challenges faced by the students. For example, they offered diverse perspectives and experiences related to themes such as mixed initial experiences, contributing to a more comprehensive and realistic portrayal of the study's outcomes.

RESULTS

Eight themes were identified and reported below.

Motivation for Overseas Studies

The primary motivation for CIS pursuing education in the U.S. was the pursuit of higher-quality education. Billy explained, "My motivation is about opportunities for better education. My academic background was not strong, so I

could not get into top universities in China.” The students recognized the differences in education systems and the U.S. Billy elaborated,

I can learn new thinking skills here through small group discussions in class or other situations, which I cannot experience in China...This knowledge I cannot learn from textbooks...Education in China does not encourage thinking. Instead, it is focused on textbooks and results and lacks practical application. It is not helpful for my future life... I want to apply what I learn into real life.

Another student, Rose, said, “The study environment is better here,” whereas Yan mentioned, “I want to experience a broader world and reach my potential.”

Some students aspired to live in the U.S. after graduation. Rose shared, “My parents want me to work and live here after my graduation.... I applied to study the U.S. during the COVID-19 pandemic. My father has thought about this for a long time.” Xiao stated, “My goal is to find internship and research opportunities through my department.” These motivations reflect broader trends of migration from China, with an overseas education pathway to future opportunities.

At present, the students’ immediate goal is to complete the Intensive English Program or degree. Yan remarked, “My goal is now to pass the IEP although I am not particularly interested in English.” The necessity of passing the English program before progressing to the degree program was acknowledged by all the students.

Travel Restrictions and Delayed Required Tests

All the students reported being delayed due to travel restrictions and taking the required tests. Many challenges were reported, ranging from applying for travel documents to being delayed by the restrictions of the quarantine policy. The issues included challenges in applying for passports, taking the TOEFL, and arranging flights. Billy said:

Yes, some difficulties. In the application process, I went to different places. I found tutorials for TOEFL; I took TOEFL 10 times. My school helped me with my college application. I also got help from private consulting agencies...I cannot take the SAT/TOEFL as I can in a normal situation (because of COVID-19). I had to go to another province to take the test.

The students also encountered delays in passport applications, although the video applications were generally smooth. Billy noted, “The visa application process was smooth, probably because my parents own a business and are not government workers.”

Travel from China to the U.S. was particularly challenging. Billy recounted, “Flying to the U.S. was difficult; I had to take an indirect route with stops in two cities in China before reaching the U.S.” Rose added:

The pandemic created both practical and psychological problems for me. The pandemic is a barrier. I faced big problems. My TOEFL was delayed, and finally, for one whole year. In addition, I broke down, so upset. Finally, I did not take the test and I came... My passport application was also delayed by the authorities, unless you know someone who is a police officer. Otherwise, you cannot obtain the passport. Finally, I found a police person who we know and got it done. After this, we contacted a consulting agency for overseas studies; they helped me apply to study in the U.S. The visa application was fine.

The late reopening of test sites significantly impacted students' travel plans, with some experiencing delays of up to a year. Yan expressed concerns about safety and health, stating, "The most challenging aspect was COVID-19. Compared with those in China, the public health policies in China are inadequate. I worry about contracting COVID-19 and the implications for returning to China."

Another student mentioned, "Keeping myself from getting sick was challenging, especially with limited test places and seats for the TOEFL. The visa application process was fine, but I had to travel to another city due to a flood in my own city."

Owing to ongoing quarantine policies in China and limited flights, students were unable to visit their families. This resulted in significantly higher ticket prices. Rose said, "I cannot visit my parents due to China's quarantine policy and the high cost of air tickets." Xiao added, "I did not return to China for two years, and even when I did, finding tickets was still difficult."

Mixed Experiences After Arrival

Upon arriving at campus, the students reported various experiences. Xiao and Rose faced immediate challenges, particularly with the use of English. Rose share:

I felt loneliness and didn't know what to do when I was by myself. I also struggled to find female friends, which made me feel sad. Language is a significant barrier for me, and I found that others' English skills were not much better.

Xiao expressed similar sentiments: "I felt challenged and was unsure about my major during the first year. I was confused and didn't know what direction to take."

In contrast, other students initially had positive experiences. Yan remarked, "Things here are attractive and interesting. I felt good about this place." Support from the Intensive English Program (IEP) was beneficial for some students' initial adjustments. Xiao noted, "I followed the advice from my academic advisor. I thought the IEP advisor's guidance was more helpful than that of my academic advisor [professor]. Billy also appreciated the support: "Instructors took me on campus visits, which helped me understand life here. This was very helpful." Yan found that the program provided various activities and options: "[the program offered] more activities and choices. I could try different things."

Differences in Education Systems

The differences between the education systems in China and those in U.S. Chinese education are often focused on direct teaching, textbooks, and memorization, whereas U.S. education emphasizes student-centered learning, guided discovery, projects, and group work. Most students found these differences challenging, except for Yan, who felt well prepared. Yan commented, “The international school I attended prepared me well for studying here. I adjusted easily, though I found spoken English challenging, but not written or reading English. My English proficiency was better.”

Billy described his experience: “I work hard in the IEP, and I find the curriculum challenging. The instructors are demanding. Additionally, I need to wear a hearing aid, which adds to my challenges.” Rose also faced difficulties and noted that the pandemic affected her motivation:

I am only studying English in the IEP now. I have some challenges, but not enormous. The pandemic has influenced my motivation to study, and I rate my academic pressure as 4 on a scale of 1--10.

The transition to online classes was another source of difficulty. Xiao explained, “Online classes were challenging, especially for experiments. My first semester was fine with face-to-face classes, but after the COVID-19 pandemic started and online classes began, it became difficult.”

Xiao rated his academic pressure as moderate, approximately 6--7 on a scale of 1--10, and linked it primarily to English usage: “Writing in English, such as lab reports, was challenging owing to difficulties with finding materials and formats.” However, Xiao acknowledged that his international school background was beneficial in some way:

My experience in international high school helped me adjust here because I was familiar with the knowledge and study methods. Some classes, such as biology and chemistry, were challenging, as we did not perform many experiments in high school science classes.

Yan was the only student who felt relatively comfortable: “The curriculum is more relaxed, and I have more personal free time. The study methods are similar to those in my international high school, so I do not feel much stress in studying.”

Inadequacy of International School Preparation

Despite the expectation that students from international schools would be better prepared for studying overseas, the findings of the current study suggest otherwise. Most of the students, with the exception of Rose, had attended international programs and were preparing for overseas education. It was anticipated that their English proficiency and readiness for an American education system would be stronger. However, contrary to this expectation, the students experienced significant challenges in adjusting to the American education system.

This observation aligns with the first author's previous experiences with consulting in China. This study highlights a critical gap in the effectiveness of international school education in preparing students for the demands of studying

abroad. The participants' struggles indicate that the international schools did not adequately equip them for the academic and cultural transitions they faced.

English proficiency, which is a crucial factor in overseas studies, was found to be a significant issue. The inadequacy in English education at international schools appears to have left these students less prepared than anticipated. This finding underscores the need for a more comprehensive approach to English language instruction and preparation for international education.

Inadequate English Preparation and Performance

Most students reported significant challenges with their English skills, which created barriers to their academic success. They expressed difficulties in listening, speaking, and writing in English, which affected their overall performance in class.

Rose noted that their preparation for studying abroad was inadequate and focused primarily on TOEFL preparation rather than comprehensive English language skills. Rose shared, "However, the preparation was not sufficient, only focusing on TOEFL. Classes are now divided into reading, listening, and writing. I find English writing particularly challenging, especially citations. The most difficult part for me is listening; reading and speaking are also challenging."

Yan highlighted a similar struggle: "I am not good at spoken English. I had little practice in high school and passed the TOEFL with the help of a private tutorial in China." Xiao echoed this sentiment, saying, "English writing in my first year was challenging, especially with my lab reports."

The students reported spending extra time on assignments, such as compositions, which led to long hours and intensive workloads. This intensive work contributed to their academic stress. Only Yan experienced relatively few problems with adjustment, which was attributed to the similarities between the curriculum and study methods at his international high school and those at his current institution.

These experiences underscore a significant relationship between prior English preparation and later academic performance. The lack of comprehensive English language training before arriving in the U.S. appears to have affected the students' ability to adapt effectively to their academic environment.

Cultural and Living Adjustments

All the students reported facing significant adjustment issues related to living on campus and adapting to different cultures and ways of life. Billy expressed difficulties with cultural differences and logistical issues: "Different cultures in the U.S. Still adjusting to it, such as direct communication here and some perceptions about me as a foreign student. I must eat on campus, and on Saturdays, the student cafeteria is not open. It is not convenient."

In contrast, Yan reported a smoother adjustment: "I am fine adjusting here. I feel comfortable staying with Chinese people only. I am optimistic and easy to feel happy." However, Yan's experience was not shared by the others.

Food was a major issue for many students. They struggled with local American cuisine, and two students mentioned difficulties with shopping and using the payment system. Yan noted, "I am not used to the payment system here. China was more convenient with WeChat (using cell phones)." The students found that the electronic currency system in China, which is widely adopted, made transactions more convenient than did the U.S. system.

Social integration poses another challenge. Many students reported a lack of local friends and difficulties in making connections with domestic students. Rose said, "Cultural and language differences are barriers for me to adjust here. I hang out with my Chinese friends; it helps me adjust to life here. I have tried to make friends with local students, but it is not easy, and it takes a long time." Xiao shared, "I live on campus, but I do not socialize with others. I only socialized with my roommate. They were also in the IEP." Yan mentioned, "I am more of an introvert. Not interested in making friends with Americans and strangers."

The use of English emerged as a barrier to effective communication and relationship-building. Many students primarily interacted with fellow Chinese students, limiting their exposure to the broader campus community. Some students mentioned feelings of loneliness and homesickness, which were exacerbated by the inability to return to China during long holidays due to COVID-19. Yan shared, "I miss home, especially when my grandfather passed away recently; I cannot go back." Yan also expressed a preference for staying home and avoiding social activities: "I would like to stay home and do not like to go outside. I will stay here during the winter break; I worry that it will be boring. I do not reach out to make friends here yet."

Despite these challenges, students were gradually learning to cope with and adapt to their new environment. Xiao noted, "I learned how to call a taxi, take a bus, and how to buy things. Public transportation here is not as good or easy as it is in China."

Limited Self-care and Coping Strategies

The students faced significant stress while studying in a new environment, but they reported limited use of effective coping strategies. Some students sought support from teachers or counselors with mixed results. Xiao noted, "IEP advisors helped me a lot through team advising." In contrast, Billy mentioned, "I tried to ask teachers for help, but the effects were minimal. My listening skills cannot improve quickly, and this is an English environment." Rose shared her approach to coping with stress:

I force myself to go to sleep when I feel stressed. I tend to avoid thinking about it. I just put myself into my studies and keep busy, even though I know it's not a good solution.

Rose also mentioned personal struggles: "I have dating problems, but I cannot resolve them. The more I think about them, the more confused and troubled I become. Therefore, I try to forget about them." Recently, Rose started exploring Buddhism as a form of stress relief: "I'm trying to forget all of these issues through Buddhism."

Billy and Rose sought professional help from counselors. Rose said, “I see a counselor once or twice, but preparing for sessions creates additional pressure. I’m not sure if I should continue, as I feel my problems are unresolved.” In contrast, Xiao found some relief through support from friends and family:

I learned from other students who had more experience. I also talked to my parents and friends. My parents, particularly my father, who is a biology professor, have helped me a lot through virtual meetings.

Yan, however, chose not to seek help from others and reported feeling isolated: “I prefer to stay home and do not like to go outside. I will stay here during the winter break, which I worry will be boring.” Yan admitted, “I have not reached out to make friends here yet.”

Xiao also mentioned a preference for handling issues independently: “I like to deal with problems by myself and do not want to seek help from professionals like counselors.”

With respect to self-care, few students had established effective strategies or knew how to balance their lives. Most students focused primarily on their studies and socialized mainly with other Chinese international students, avoiding campus activities. This limited engagement with broader campus life suggests a lack of effective self-care practices and social integration strategies.

DISCUSSION

The findings from this study underscore the multifaceted challenges international students face during their transition to study in the U.S., especially under the strains of the COVID-19 pandemic. The pandemic significantly affected students’ experiences, from delays in passport and visa processes to difficulties with online classes and high travel costs. These issues compound students’ stress and disrupt their academic and personal lives.

This study confirms previous research on the pandemic’s impact on loneliness, isolation, and emotional struggles (Fischer & Whatley, n.d.; Kerr, 2022; Maleku et al., 2021; Serafini et al., 2020; Song et al., 2021; Xiong et al., 2022), highlighting how COVID-19 exacerbated existing challenges for international students.

Self-Regulation and Coping Strategies

The findings align with the self-regulation model (Miller & Brown, 1991; Chen & Lin, 2018), demonstrating the importance of self-regulation in managing stress. However, the students struggled with effective coping strategies. Many reported using avoidance or minimal strategies, reflecting low self-regulation skills.

This study provides new evidence that self-regulation directly affects academic stress, with a negative and significant relationship during the COVID-19 pandemic. Furthermore, this study elucidates the relationship between stress and self-regulation, corroborating the findings of previous studies (Brock, 2016; Chen & Lin, 2020) conducted prior to the pandemic.

This study revealed a lack of self-care coping strategies among the students. The limited use of coping strategies, such as seeking professional help or engaging in self-care, points to the need for better self-regulation and coping strategies and improved support systems and coping resources for international students.

Motivation and Academic Adjustment

Students were motivated by the desire for better education and career opportunities in the U.S., aligning with King and Baily's (2021) findings. This motivation could help the students continue to complete their program. However, given their limited English ability and ability to enrol in an IEP, their immediate goal was to achieve this goal in the IEP and move on to a degree program. One of the students did not join the IEP, his English was better, and he was directly admitted to a degree program. Despite this motivation, challenges such as limited English proficiency and adjustments to the American education system have hindered their academic progress.

The study revealed that students from international schools in China faced difficulties due to inadequate preparation, contradicting the assumption that international schools provide sufficient readiness for U.S. education. This also confirms the first author's consultation experiences in China. He has seen a mixed quality of international schools there. Some international schools use Chinese as the teaching medium, although they believe that their classes are in English. These schools should use English as their teaching language for their students.

Cultural and Social Adjustment

Students encounter various adjustment issues related to cultural differences, food, transportation, and social integration. Most chose to socialize mainly with other Chinese students, which limited their overall integration into the campus community. This confirms similar findings for international students (Huang et al, 2024; Presbitero, 2016; Yuan et al. 2024). Furthermore, this socializing pattern exacerbates the stress experienced by the CIS, as two individuals reported seeking counseling for their emotional distress and related issues.

The lack of engagement with broader campus activities and the preference for staying within their comfort zones underscore the need for initiatives that promote social integration and cultural adaptation (Li et al., 2010; Cao et al., 2017; Rienties et al., 2011). It appears that the IEP helped the ICS in some way by providing social and cultural activities. International student advisors can work collaboratively with the IEP or similar programs to develop and offer culturally enriching programs, social events, and activities.

Racial Discrimination, Stress, and Social Connectedness

While students did not report significant experiences of racial discrimination, the potential for such issues should not be ignored. Encouraging international students to engage with the broader campus community can mitigate perceived

discrimination and reduce stress (Wei et al., 2012; Wong et al., 2014). Wei et al. (2012) reported that high social connectedness in the ethnic community weakened the strength of the association with perceived racial discrimination. However, social connectedness in mainstream society is significantly associated with less perceived general stress, less perceived racial discrimination, and less posttraumatic stress symptoms. This suggests that student affairs professionals should encourage international students to be involved in the campus community with more students, not just those associated with Chinese students, as was the case in the current study.

Wong et al. (2014) reported that among international Asian students who had high levels of masculine identity, their perceived racial discrimination was positively related to their subjective masculinity stress. Additionally, subjective masculinity stress was found to have mediating effects on the relationship between perceived racial discrimination and psychological distress.

Policy and Service Recommendations

Pre-Arrival Preparation: Schools in students' countries of origin should enhance English language training and provide a better understanding of the U.S. education system.

Support Services: IEPs should continue to play a critical role in improving English proficiency and bridging cultural gaps. They should also offer more comprehensive support during the transition and adjustment phases. This could help enhance students' social integration into the new community (Presbitero, 2016)

Addressing Travel Barriers: Governments and airlines should work toward reducing visa restrictions and high travel costs to ease the burden on international students.

In summary, this study highlights the complex challenges faced by international students, exacerbated by the COVID-19 pandemic. It emphasizes the need for improved prearrival preparation, enhanced support services, and effective coping strategies to better support students in their academic and personal adjustment. Addressing these issues is crucial for fostering a more supportive and inclusive environment for international students.

Limitations

The findings offer valuable perspectives on how CISs deal with stress and manage their behavior during the COVID-19 pandemic. However, this study has several shortcomings. First, the study relied solely on interview data, which may not capture the full spectrum of experiences or behaviors. Future studies may incorporate alternative data collection methods, such as surveys and observations, to gather a broader range of information. Surveys could provide quantitative data to validate qualitative insights from interviews, and observations could offer a contextual understanding of students' interactions and behaviors. Second, only CISs were included in the study, which may not reflect the experiences of other

international students. Additionally, the majority of CISs in this study was enrolled in a one-year intensive program designed specifically for students with limited English proficiency. Future research should incorporate a diverse sample of international students from various countries and with a range of English proficiency levels to enable a comprehensive comparison and analysis of their experiences. This would provide a more comprehensive view of the challenges faced by different groups and help identify universal and culturally specific issues. Third, because the study was limited to a single public university, it did not consider the variety of experiences that students from other learning environments would have had. In the future, the research should be expanded to include multiple universities with varied characteristics (e.g., private vs. public, large vs. small) to capture a wider range of student experiences. This would help determine if the findings are unique to a particular institution or applicable more broadly. Finally, because the study was performed during a certain pandemic, it might not fully represent how international students handle changing circumstances in the post-pandemic world. Longitudinal studies are recommended to examine how students' experiences and coping strategies evolve over time, particularly as the pandemic situation changes. This could provide insights into how resilient students are in the face of ongoing or future crises.

CONCLUSIONS

This study presents preliminary evidence of the impact of COVID-19 on CISs participating in intense English programs, as well as an explanation of their adjustments. This finding highlights the link between perceived stress and self-regulation in this population. Future studies may duplicate or broaden the current study to include other international students, such as those admitted on a regular basis from different countries of origin.

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Bios

SIU-MAN RAYMOND TING, PhD, Professor of Counseling and Director of Graduate Program in the Department of Educational Research, Leadership, Policy and Human Development at North Carolina State University. His research interest focuses on student success, career development, international students, STEM education, and online education. Email: ting@ncsu.edu.

ZHIQI LIU is a 3rd-year doctoral student in Counseling and Counselor Education at North Carolina State University. Her research focuses on international students' career readiness and multicultural competence among college counselors. Email: zliu78@ncsu.edu.
