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**An Evaluation of International Students' Perceptions About U.S. Institutions of Higher
Education Post COVID-19**

Yani Liu

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of
Education at Seattle University

2023

Abstract

The problem addressed through this project is the decline in the retention of foreign students in U.S. institutions of higher learning due to the COVID-19 pandemic. In the 2020–2021 school year, international student enrollment declined by 15%, demonstrating the direct impact of the pandemic on U.S. institutions of higher learning (Svrluga, 2021). Moreover, the financial contribution of foreign students dropped by 27% to \$28.4 billion in the same financial year, which was attributed to perceptions among international students that they were unwelcome, in addition to visa processing challenges. The purpose of the study was to examine factors influencing the retention of foreign learners in U.S. higher education institutions during the COVID-19 pandemic. The study aimed to identify the unique challenges international students faced coping with the COVID-19 pandemic while in the United States. The study further examined some key interventions higher education institutions should have implemented to ensure international students' experiences remained positive and existing challenges were resolved effectively. The study was guided by Spady's model, Tinto's theory, and the PICO framework (Considine et al., 2017; Nicoletti, 2019). The study was grounded on a systematic review of pertinent literature. The study utilized literature sources including articles, journals, books, conference proceedings and previous research reports relevant to the topic of the study. These were acquired from electronic databases including databases of U.S college and Universities, JSTOR, ProQuest, ScienceDirect, and Emerald. The PRISMA 2009 flow diagram Was used in selecting literature sources used in the study. A comparative analysis was used to examine results from quantitative studies. Qualitative studies were analyzed thematically.

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I extend my deepest gratitude to my dissertation chair Dr. Taylor Colette for her unwavering support, expertise, and mentorship throughout this research endeavor. Your guidance has been instrumental in shaping the direction of my research and fostering my intellectual growth. Thank you also for being a beacon of guidance throughout my doctoral program. Thank you for always patiently helping me overcome cultural and language barriers, allowing me to have a clearer self-awareness, which is indispensable for the development of my cross-cultural leadership. I am truly blessed to have had the opportunity to work with you on this piece.

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To my family, I owe an immeasurable debt of gratitude. Your love, patience, and understanding sustained me through the challenges and uncertainties of an entire decade as an international student. For families of international students, sending a child away to school is a major financial and emotional commitment for the whole family. I appreciate and cherish your unwavering support throughout this journey, I love you all.

Dedication

This dissertation is dedicated to those international students who, like me, are struggling in a foreign country during the pandemic, questioning themselves, being isolated, but constantly motivating themselves and working hard.

Whenever you encounter any crisis, please be proud of your own cultural differences.

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Chapter 1: Introduction

Since World War II, institutions of higher learning in the United States have welcomed an increasing number of foreign learners (Banjong & Olson, 2016). The move was part of U.S. post-World War II foreign policy aimed at boosting international education relations by sharing the country's educational advancements with the rest of the world. Consequently, over the past 5 decades, enrollment of international students in U.S. higher education institutions (HEIs) has been on an upward trend (Banjong & Olson, 2016; Bicak & Taylor, 2020). Bicak and Taylor (2020) noted that although 300,000 international students enrolled in U.S. colleges and universities in 1975, over 1 million international learners were admitted in 2017. Furthermore, data before the 2008 economic recession showed international college and university students increased by 20% between 2004 and 2007 (Ruiz & Radford, 2017). Although the growth was modest, it was higher than the overall U.S. enrollment growth, which stood at 7% over the 3 years. The Great Recession of 2008 adversely affected the global economy and contributed to a decline in international students seeking education abroad (Geiger, 2010). Nevertheless, between 2008 and 2016, college and university enrollments by international students increased by 104% (Ruiz & Radford, 2017). The highest enrollment levels were attained in the 2017–2018 and 2018–2019 calendar years when over 1 million foreign college and university students were admitted each year to U.S. HEIs. As a result, the country has enjoyed a high international student enrollment (Duffin, 2021).

Moreover, international students historically have been critical contributors to the growth and development of U.S. colleges and universities through the financial resources they bring to the country. The estimated spending on higher education rose from \$5.5 billion in 2008 to \$15.5 billion in 2016, an increase of 184% (Ruiz & Radford, 2017). In 2018, international students

comprised 5.5% of the U.S. higher education enrollment, contributed \$44.7 billion to the country's economy and supported an estimated 460,000 jobs (Timmons & Dwyer, 2020). The same year, the education trade surplus accounted for 14% of the gross U.S. services trade surplus. Furthermore, the tuition revenue generated from international students in U.S. public universities accounted for an average of 12% of total tuition revenue across the U.S. public universities in 2016. Some universities generated over 30% of revenues from foreign learners (Chen, 2021). Data indicated revenue received from international students is critical, and a decline in foreign learners' enrollment would directly and adversely impact U.S. higher education financing. Consequently, international students are significant to the well-being and growth of U.S. HEIs (Chen, 2021).

Despite the optimistic projections on the number and contributions of international students in U.S. higher education, international students in the country's colleges and universities face unique challenges as they grapple with the realities of living and studying abroad. The typical hurdles international students encountered include prejudice, adjusting to a new culture, discrimination, and the absence of a robust social support system (Essau & Trommsdorff, 2016; Heng, 2018; Taliaferro et al., 2018). Further, Alharbi and Smith (2018) explained that international students are highly likely to suffer from anxiety and depressive disorders. Therefore, international students cope with myriad issues related to living in a foreign nation. Although institutions of higher learning and education policymakers have been aware of the issues' existence, the COVID-19 pandemic has brought to sharp focus the plight of international students, as the sudden drop in enrollment has raised critical concerns about the future of international education in the country. The pandemic disrupted learning globally and led to a decline in the number of foreign students seeking higher education in the United States. The

Institute of International Education (IIE) indicated foreign students contributed nearly \$45 billion to the U.S. national economy in 2018–2019, which means losing international students has significant economic implications for the country (Alharbi & Smith, 2018).

Moreover, in the 2019–2020 school year, the number of international students studying in the United States recorded a decline of 1.8%, the first negative growth since 2006. Moreover, the enrollment of foreign learners dropped by 15% in the 2020–2021 academic year (Silver, 2021). The financial contribution of foreign learners equally dropped by 27%, from \$38.7 billion in the 2019–2020 school year to \$28.4 billion in the 2020–2021 school year, of which 91% are attributable to the COVID-19 pandemic (Stewart & Ruffner, 2021). The decline could be linked to challenges in visa processing and the general sentiment through immigration policies that have made international students feel unwelcomed in U.S. institutions of higher learning (Buckner et al., 2022; Moody, 2021). Nevertheless, a shortage of research exists on the way the crisis has impacted higher education international learners in the United States. Therefore, understanding the experiences of foreign learners and trends in higher education in the country can provide insights into some of the fundamental issues in international education. Consequently, the research sought to understand the issues foreign students faced during the pandemic to develop insights into how institutions of higher learning in the United States can leverage the findings to retain and attract more international learners in the medium and long term.

Statement of the Problem

The problem addressed through this project is the decline in the retention of foreign students in U.S. HEIs due to the COVID-19 pandemic. The pandemic significantly affected higher education, with foreign learners facing critical issues such as visa challenges and travel restrictions (Dennis, 2020; Redden, 2020). HEIs embarked on numerous efforts to support

foreign learners during the pandemic, such as successfully suing the U.S. Student Exchange and Visitor Program (SEVP) for limiting the number of online courses foreign students could take (Buckner et al., 2022). International students started experiencing challenges in acquiring visas due to policies the Trump Administration implemented (Lynch et al., 2022). Although the Biden Administration loosened student visa restrictions, the pandemic led to reconsideration of visa policies, an issue affecting the entry and stay of international students in the country. In the 2020–2021 school year, international student enrollment declined by 15%, demonstrating the impact of the pandemic on U.S. HEIs (Stewart & Ruffner, 2021). Moreover, the financial contribution of foreign students dropped by 27% to \$28.4 billion in the same financial year (Stewart & Ruffner, 2021), which was attributed to perceptions among international students that they were unwelcomed in addition to visa processing challenges (Moody, 2021). The trend indicates enrollment and retention of the foreign students in the United States will be difficult post-COVID-19. This will consequently have a negative impact on the financial resource capacities of universities (Moody, 2021).

If the current problem of international students not feeling supported is not solved, it could have significant implications for U.S. HEIs and the government. Foreign students would be reluctant to study in the United States if difficult federal visa processing remains is not reviewed (Dennis, 2020). Consequently, foreign students may be more likely to withdraw or transfer. The withdrawal or transfer of foreign students leads to loss of opportunities for academic and personal growth. Moreover, in 2018 foreign learners contributed \$45 billion to the U.S. economy, according to data by the U.S. Department of Commerce (IIE, n.d.). Therefore, failure to address issues leading to the decline in number of international students in the United States will adversely affect income generation by HEIs. Furthermore, the IIE (n.d.) articulated

foreign students play a critical contributory role in the nation's technical and scientific research, which has long-term socioeconomic benefits to the United States. Therefore, in the long term, the United States could lose the critical human resource capital and rich diversity that came through international students. If the problems facing international students remains unresolved, U.S. HEIs will experience a decline in student enrollment, loss of revenue, and loss of diverse human resources (IIE, n.d.).

Although studies on the experiences of international students in U.S. higher education exist (Alaklabi et al., 2021; Browning et al., 2021; Mattson et al., 2021; Mbous et al., 2022), there is limited understanding of the specific factors that influence their perceptions about the HEIs post COVID-19. Consequently, it is critical to investigate the experiences of international students in U.S. HEIs during the pandemic period and determine the factors that will influence their retention going forward. To fill the knowledge gap, this study provided evidence-based recommendations for policy and practice to promote the retention and success of international students in U.S. higher education.

Purpose

The purpose of the study was to examine the factors that influenced the retention of foreign learners in U.S. HEIs during the COVID-19 pandemic period. The study aimed to identify the unique challenges international students faced coping with the COVID-19 pandemic while in the United States. The study further examined some key interventions institutions of higher education should implement to ensure international students' experiences remain positive and existing challenges are resolved effectively.

Research Questions

In contextualizing the impact of COVID-19 on international students' enrollment in the United States, the study focused on two research questions:

1. To what extent did the COVID-19 pandemic affect the social and academic experiences of international students in U.S. HEIs?
2. How did institutional and policy-level factors influence international students' decision to remain enrolled in U.S. HEIs during the pandemic?

Significance of the Study

The research provided insights into the measures U.S. colleges and universities need to implement to attract more students in the future. The study also allowed educational policymakers to understand better the current shortcomings of policies on international students' well-being.

From an economic perspective, the study expanded knowledge on policies that can be implemented to make the United States a more attractive destination for foreign learners. By understanding the link between such issues as access to health care and the perception of international students about higher education in the United States, the study provided a basis for policymakers to think about the need to implement better and more favorable policies guiding the welfare of foreign learners.

The research extensively borrowed from past research on the experiences of foreign learners in the United States to identify patterns, establish relationships and develop fresh insights into how the future of higher learning is likely to be affected if the current circumstances remain unchanged. The research aimed to inform policymakers at the national, state, and university levels about international students' perspectives on higher education in the country.

Although policymakers may construe the current decline in international student enrollment as a temporary issue that will be corrected as the severity of the pandemic declines, the study conceptualized the pandemic as a trigger that exposed vulnerabilities in international education that have existed but remained inadequately addressed over the years.

Summary of Methodology

The study employed a systemic review of literature relevant to answering the research questions. Relevant literature on the effect of the COVID-19 pandemic on the social and academic experiences of international students in U.S. HEIs, the influence of institutional and policy-level factors on international students' decision to remain enrolled in U.S. HEIs, and factors influencing international students' decisions to continue pursuing higher education in the U.S. post-COVID-19 were reviewed.

Assumptions, Limitations, and Delimitations

One key limitation was that the data collection was limited only to U.S. universities. Consequently, the research findings may not be applicable to other countries. Nevertheless, the results are generalizable in the context of U.S. colleges and universities. They also have provided a basis for broadening research on the interventions HEIs needed to navigate the post-COVID-19 challenges in enrollment.

Another critical limitation was the use of a quantitative research design and, particularly, relying on closed-ended questionnaires in the data collection process. Because the study had preset responses from which participants chose the most appropriate answers, the research may have failed to capture alternative perspectives respondents could have raised. Although the issue was beyond my control, its effect on internal validity could have been mitigated by designing the

questionnaires based on the theoretical background to ensure the findings were consistent with the literature.

Definitions of Terms

COVID-19 is a novel coronavirus first identified in Wuhan, China in December 2019. It has since spread to many countries worldwide, causing a global pandemic.

Culture refers to the set of beliefs, values, and learned behaviors individuals share with others to create a sense of identity and belonging in a societal context (Lebron, 2013; Raeff et al., 2020).

International students refers to learners who are not citizens or permanent residents of the United States and are studying at a U.S. HEI.

Retention refers to continuous enrollment of students who complete their studies in HEIs (Brown et al., 2022).

Social support refers to the support to which an individual has access due to having ties to other groups, people, and the community at large (Ozbay et al., 2007).

U.S. institutions of higher education are colleges and universities in the United States that offer postsecondary education.

Chapter Summary

Overall, this chapter contextualized the impact of the COVID-19 pandemic on the enrollment of international students in U.S. HEIs. It provided background information on the changing dynamics in enrollment numbers and examined the potential shift that could arise if sufficient interventions are not implemented.

The next chapter reviewed existing literature on the experiences of international students in HEIs. This enabled me to determine trends and externalities influencing the experiences of international students.

Chapter 2: Literature Review

This chapter contains a review of research literature and is organized as follows: (a) international students' satisfaction with their academic experiences in the United States, (b) international students' perceptions of U.S. HEIs' responses to COVID-19, (c) impact of COVID-19 on international students in the United States, (d) international students' perceptions of U.S. higher education post-COVID-19, (e) the theoretical framework guiding the research, and (f) the chapter summary.

History of International Students Attending U.S. Higher Education

For a long time, the United States has been the most popular destination for foreign students because of the excellent quality of U.S. higher education, its value on the worldwide labor market, and the abundance of postgraduation work prospects in the United States (Israel & Batalova, 2021). Over 1.1 million international students attended U.S. schools in the 2019–2020 school year, a decline of over 20,000 foreign students from the previous year after 10 years of continuous expansion. High numbers of student visa delays and rejections, a hostile political atmosphere for immigration under the Trump Administration, and more chances to study abroad were all major contributors to this drop. The COVID-19 outbreak has only served to exacerbate these preexisting problems. Limited access to U.S. embassies and consulates, travel restrictions and personal safety concerns delayed VISA issuance and travel arrangements for international students (Israel & Batalova, 2021).

During the 1950s, there was a significant increase in the total number of foreign students attending institutions in the United States. In the 1949–1950 school year, there were just 26,000 international students; this number was expected to surpass 1.1 million in the 2019–2020 school year. Comparatively, the percentage of international students enrolling in a 4-year college or

university in the United States rose from 1% in 1949–1950 to over 6% in 2019–2020 (Israel & Batalova, 2021). Nonetheless, the number of international students studying in the United States has fallen over the last decade, falling for the first time in years during the 2019–2020 school year. In the 2009–2010 school year, they accounted for 29% of all international students; by the 2019–2020 school year, that number dropped to 25%. Participation in Optional Practice Training (OPT) among students has grown from 10% to 21% during the same time span. International student enrollment at U.S. colleges and universities began to decline in 2016–2017 and has continued to fall ever since. There were 268,000 new overseas students attending U.S. universities in 2019–2020 (Israel & Batalova, 2021).

In the 2019–2020 school year, students from China accounted for 35% of all international students, followed by students from India (18%), South Korea (5%) and Saudi Arabia (5%). Even though the foreign student population as a whole has leveled down, the number of Chinese students enrolling at U.S. universities has been growing steadily over the last few years. China is one of just three top 10 origin nations where the number of foreign students grew between the 2018–2019 school year and the 2019–2020 school year, the others being Taiwan and Brazil (Israel & Batalova, 2021).

Saudi Arabia had the largest decrease in student enrollment (17%) among the top 10 countries in the 2019–2020 school year, followed by India (4%) and South Korea (5%). This is a result of the decreased funding from that nation for its students to study abroad (Israel & Batalova, 2021). Of the top 25 countries that students are coming from, Spain had a 10% increase, and Bangladesh saw a 7% increase. Despite the increase, students from each country still made up less than 1% of all foreign students at U.S. universities. Throughout time, there has been a dramatic shift in the country of origin distribution among foreign students. In the 1949–

1950 school year, students from Canada, Taiwan, India, and other European and South American countries made up the majority of international students enrolled at U.S. colleges. More students from Asia started enrolling as international students after the Immigration and Nationality Act of 1965 abolished national-origin quotas (Israel & Batalova, 2021).

Previous Research on International Students' Perceptions of U.S. Higher Education

International Students' Satisfaction With Their Academic Experiences in the United States

Numerous studies have been undertaken on international students' satisfaction with their academic experiences in the United States. The findings have indicated international students generally have positive experiences at U.S. institutions, with high levels of satisfaction with their educational programs and the support provided by their respective institutions (Korobova & Starobin, 2015; Skinner et al., 2019; Urban & Palmer, 2016; Wu, 2015). For example, a study by Korobova and Starobin (2015), which used international and American student data obtained from the National Survey of Student Engagement (NSSE) data set, reported high levels of satisfaction among international students concerning their overall educational experiences. Similarly, Skinner et al.'s (2019) study on 1,921 foreign learners in the United States revealed most international students were satisfied with their academic experiences, particularly the quality of educational programs and their engagement with faculty. Therefore, foreign students have enjoyed positive experiences in U.S. HEIs (Skinner et al., 2019).

However, some studies have found international students face particular challenges in the United States that may affect their satisfaction with their academic experiences. For example, Kim and Edens (2017) found language barriers and cultural differences were common challenges faced by international students. In this regard, some international students lack the requisite language proficiency to integrate with the university community, resulting in isolation. Hegarty

(2014) shared a similar viewpoint and noted language barriers adversely affect students' ability to assimilate into university life. International students can only reduce fears about writing and speaking in English with effective interventions through effective English learning programs. Moreover, Alshafi and Shin (2017) contended differences in cultural norms and aspects equally complicate the ease of international students' adjustment to a new learning environment, with the researchers noting the scope of cultural competence extends to such other issues as differences in teaching and learning approaches used in the new culture. Newsome and Cooper (2016) similarly argued unrealistic culturally based expectations often lead to stress and anxiety, impeding international students' academic experience. Language barriers and cultural differences may impact international student's ability to engage fully in their academic programs and may affect their overall satisfaction with their experiences.

Therefore, previous research has suggested although international students generally have positive experiences at U.S. HEIs, they may face challenges that impact their satisfaction with their academic experiences (Smith, 2020). In particular, studies have suggested culture and language barriers adversely affect the extent to which international students find satisfaction with their academic learning (Leong, 2015). Nevertheless, a gap exists in that the literature has not detailed the extent to which the COVID-19 pandemic's influence on international students' social and academic life has affected their decision to remain enrolled in U.S. HEIs in the future.

International Students' Perceptions of U.S. HEIs' Responses to COVID-19

An equally important dimension for contextualizing international students' experiences in U.S. HEIs is the perceptions of international learners regarding their institutions' responses to the COVID-19 pandemic. In this regard, some studies have found international students generally have positive perceptions of their institutions' responses to the pandemic (Aristovnik et al., 2020).

Specifically, colleges and universities have provided adequate support and resources for remote learning (Lemay et al., 2021; Mattson et al., 2021). For example, Mattson et al. (2021) explored international students' academic experiences and found students enjoyed a smooth transition to remote learning through such intervention measures as providing access to technology and academic resources by the institution. Moreover, Fischer and Whatley (2022) found international students in the United States received support through counseling services and online academic advising. Further, Durrani (2020) noted some institutions implemented emergency wellness and health insurance plans, which international students perceived as providing critical support during the pandemic.

However, other studies have found international students may have concerns about their institutions' responses to the pandemic (Hawley et al., 2021; Hawley et al., 2021). In this regard, international students have felt isolated and did not receive the requisite support to manage the transition to the remote learning environment (Martirosyan et al., 2022; Mbous et al., 2022). Additionally, some international students have reported feeling uncertain about their future in the United States due to changes in immigration policies and the potential impact of the pandemic on their academic progress (Buckner et al., 2022; Chirikob & Soria, 2020; Mbous et al., 2022). Consequently, previous research has suggested international students generally have positive perceptions of their institutions' responses to the COVID-19 pandemic (Sustarsic & Zhang, 2022). Still, some concerns and challenges may need to be addressed.

Impact of COVID-19 on International Students in the United States

Challenges International Students Faced During the Pandemic

One main challenge international students faced during the COVID-19 pandemic was the shift to remote learning. As U.S. colleges and universities closed their campuses and moved

classes online, many international students struggled to adapt to this new learning mode (Barrot et al., 2021). In particular, Barrot et al. (2021) noted the transition to an online mode of instruction led to challenges in terms of inadequate preparation for online classes, issues with access to online course materials, and other hurdles in learning, such as communication with professors and classmates as well as participation in online discussions and assignments.

In addition to challenges with remote learning, international students also faced difficulties due to changes in visa policies during the pandemic. Some international students had difficulties obtaining or renewing their visas, which created uncertainty and anxiety about their ability to continue their studies in the United States (Meiksin, 2020; Redden, 2020). The issue was particularly challenging for international students who could not return to their home countries during the pandemic and had to extend their visas or make other arrangements to remain in the United States (Redden, 2022).

Financial challenges have also been a concern for many international students during the pandemic. Many have lost part-time jobs that were a source of income, and some have had to cope with unexpected expenses related to the closure of campus facilities or the need to return home (Despard et al., 2020; Parker et al., 2020). The challenges have added to the stress and uncertainty many international students face, who may be unsure about their financial stability and ability to proceed with higher education (Parker et al., 2020).

Overall, the COVID-19 pandemic has posed significant challenges for international students, including difficulties with remote learning, changes to visa policies and financial hurdles. The issues have raised concerns about the future of international education in the United States and the need for institutions to provide support and resources for international students during the pandemic (Meiksin, 2020; Redden, 2020).

Responses Implemented by U.S. HEIs

To address challenges international students faced during the COVID-19 pandemic, many U.S. HEIs implemented a range of support measures and resources. For example, institutions have provided technology and academic support for remote learning, including access to online course materials, instructional videos, and tutoring services (Ali, 2020; Organization for Economic Co-operation and Development, 2020). In addition, institutions implemented flexible policies for international students, such as extending deadlines for coursework and allowing for a reduced course load (Ali, 2020).

Some institutions provided additional support and resources for international students, such as dedicated support staff, online workshops, and webinars on remote learning and visa policies (Veerasamy & Ammigan, 2022). Moreover, numerous institutions provided international students with advisers, tutoring services, and mental health support to help them cope with the challenges of the pandemic (Durrani, 2020; Fischer & Whatley, 2022).

U.S. HEIs have addressed the financial challenges students faced during the COVID-19 pandemic. Some initiatives include supporting remote learning and implementing flexible policies for international students. For example, some institutions have provided emergency financial aid or hardship grants to international students who have lost income or faced unexpected expenses due to the pandemic (Jackson et al., 2022; NAFSA, 2020). Moreover, an American Council on Education report showed numerous proposals were made and implemented to ease the burden of higher education on students. In particular, students were allowed access to low-cost capital and flexible payment plans or waived fees for services such as housing or campus facilities closed or unavailable during the pandemic (Jackson et al., 2022).

Furthermore, some institutions have worked with international student organizations and advocacy groups to provide support and resources for international students during the pandemic. For example, the IIE (2020) launched the COVID-19 Student Emergency Initiative to provide emergency funding and support to international students affected by the pandemic. Through partnerships with HEIs and other organizations, the initiative has provided financial assistance and other resources to help international students continue their studies and succeed academically during the pandemic (IIE, 2020).

International Students' Perceptions of U.S. Higher Education Post-COVID-19

Data Sources on International Students' Perceptions of U.S. Higher Education During the COVID-19 Pandemic

One potential data source was the annual Open Doors Report on International Educational Exchange, published by the IIE (2020). The report highlighted international students' enrollment and characteristics. The Open Door Report also outlined international students' perceptions of their academic experiences at U.S. HEIs. The IIE surveyed international students at U.S. institutions in 2021 and found most reported high levels of satisfaction with their academic experiences.

Additionally, the report included data on institutions' responses to the COVID-19 pandemic, including their support for international students and their challenges (IIE, 2020). In the 2021 report, the IIE surveyed over 300 institutions and found most had implemented measures to support international students during the pandemic, such as providing technology and academic support for remote learning and implementing flexible policies for international students. However, the report also found institutions faced challenges in supporting international

students during the pandemic, including difficulties with remote learning and changes to visa policies.

Overall, the Open Doors Report data suggested international students generally have positive perceptions of their academic experiences in the United States and the support their institutions provided (IIE, 2021). Still, challenges and concerns may need to be addressed in the post-COVID-19 era. Although the Open Doors Report provided valuable data on international students' perceptions of U.S. higher education prior to the COVID-19 pandemic, it did not include information on how the pandemic impacted international students' views. This issue constitutes a critical research gap for the study (IIE, 2021).

Another potential data source is analysis surveys conducted on international students' perceptions of U.S. higher education in the post-COVID-19 era. For example, the Association of International Educators (NAFSA, 2020) conducted surveys on international students' experiences during the pandemic, including students' perceptions of their institutions' support and institutions' challenges. In a study conducted in April 2020, NAFSA surveyed senior leadership at U.S. institutions of higher education, where 50% of respondents reported international students received extensive support ranging from scholarships to housing refunds and money to cater for their food and rent expenses. Although international learners felt supported by their institutions during the transition to remote learning, some had concerns about the impact of the pandemic on their academic progress and future in the United States (NAFSA, 2020).

International students have continued to face challenges during the pandemic, including difficulties with remote learning and financial insecurity (NAFSA, 2020). NAFSA survey also found international students were concerned about the impact of the pandemic on their ability to

obtain or renew visas, and many reported feeling uncertain about their future in the United States.

Overall, data from these surveys suggest international students may have concerns and challenges that need to be addressed in the post-COVID-19 era, including difficulties with remote learning, financial insecurity, and changes to visa policies. These challenges may impact international students' perceptions of U.S. higher education and their decision to continue their studies in the United States (NAFSA, 2020).

The IIE undertook an equally important study in May and June 2020, in the early stages of the COVID-19 pandemic. The survey, which included responses from international students, educators, and institutions of higher education across the United States, aimed to assess the impact of the pandemic on international education. The survey found the pandemic significantly impacted most international students. In response to the closure of face-to-face classes, institutions provided different solutions, with 58% offering students the option of enrolling in online classes, 40% proposing deferment of classes until spring or fall, and 10% offering refunds (Martel, 2020a). Nevertheless, students reported their academic plans were disrupted and their financial situation affected (Martel, 2020b). Additionally, 59% of international students reported facing challenges with accessing student support and services while on campus, and 68% were unable to access online courses. A further 62% contended they had difficulties adjusting to the online course schedule, mainly due to variations in time zones. Moreover, 74% noted they had decreased their engagement with peers and the faculty as a result of the pandemic (Martel, 2020a). Despite the challenges, the survey found international students generally had positive perceptions of the support provided by their institutions during the pandemic. In this regard, 78% of international students surveyed reported their institutions provided them with guidance on

student visas, while 72% noted increased communication on campus regarding health and well-being. Similarly, over 60% stated they received adequate online learning support. Consequently, despite existing challenges, HEIs strived to maintain a delicate balance between meeting international students' academic and socioeconomic needs (Martel, 2020a).

The findings suggest international students' perceptions of U.S. HEIs may have been largely unaffected by the COVID-19 pandemic, at least in the early stages. However, the long-term impact of the pandemic on international students' views of U.S. HEIs remains unclear and will likely depend on a variety of factors, such as the duration and severity of the pandemic, the ability of institutions to adapt to the changing circumstances and the support institutions provided to international students (Martel, 2020a).

Overall, the analysis of survey data or other empirical evidence on international students' current perceptions of U.S. HEIs provides valuable insight into the challenges and concerns faced by international students in the post-COVID-19 era. The empirical data further highlighted how institutions respond and continue to respond to the challenges and the factors that may influence international students' perceptions of U.S. higher education (Martel, 2020a, 2020b). However, additional research is needed to gain further insight into international students' current perceptions of U.S. HEIs. This study's focus on international students in the later stages of the pandemic will broaden the discourse about the learners' perceptions in the post-COVID-19 period. The study further examined the impact of the pandemic on international students' satisfaction with their academic experiences and overall perceptions of U.S. higher education.

Factors That Could Influence International Students' Perceptions

Numerous factors may influence international students' perceptions of U.S. HEIs in the post-COVID-19 era. A key issue is international students' satisfaction with their academic

experiences in the United States (Newsome & Coper, 2016). In this regard, Newsome and Coper (2016) suggested international students who are satisfied with their cultural and social experiences are more likely to have positive perceptions of their institutions and are less likely to experience negative effects such as homesickness or culture shock. In the context of the COVID-19 pandemic, international students' satisfaction with their academic experiences may be influenced by a variety of factors, including the quality of online instruction and the availability of support services for remote learning (Newsome & Coper, 2016). For example, a study by the IIE and CAMRI (2020) found international students who reported being satisfied with the support provided by their institutions for online learning were more likely to report being satisfied with their overall academic experience. Therefore, students who have positive academic experiences within the HEIs are likely to have positive perceptions about the institutions (IIE & CAMRI, 2020).

Another potential factor that may influence international students' perceptions is the support provided by their institutions during the pandemic. The IIE and CAMRI (2020) study found international students who reported receiving adequate support for their well-being during the pandemic were more likely to have positive perceptions of their institutions and were less likely to report feeling uncertain about their future in the United States.

Additionally, international students' perceptions may be influenced by the policies and initiatives implemented by their institutions in response to the pandemic. For example, institutions that have implemented flexible policies for international students, such as allowing for the deferral of admission or providing financial assistance, may be more likely to receive positive perceptions from international students (IIE & CAMRI, 2020).

Furthermore, international students' perceptions may be influenced by their overall satisfaction with their experiences in the United States. Previous research has shown international students who had positive experiences in the United States, such as making friends and engaging in extracurricular activities, were more likely to have positive perceptions of their institutions and the U.S. higher education system as a whole (Buckley et al., 2018; Urban & Palmer, 2016). In the context of the COVID-19 pandemic, international students' experiences may be influenced by factors such as the availability of virtual extracurricular activities and the support institutions provide for maintaining connections with peers and other campus community members (Urban & Palmer, 2016).

Additionally, the quality of the institution's response to the pandemic, the availability of resources and support for international students, and the overall reputation of the institution. For example, the American Council on Education (ACE, 2020) found the quality of an institution's response to the pandemic was a key factor in international students' satisfaction with their experiences in the United States. Institutions providing support for online learning and other services impressed international students (ACE, 2020).

The availability of resources and provision of requisite support for international students plays a significant role in shaping their perceptions about HEIs in the United States. Urban and Palmer (2016) found international students who had access to resources and institutional support were more likely to have positive perceptions about the learning institution. Roberts and Dunworth (2012) established that U.S. tertiary institutions, which met international students' expectations of service provision, were perceived positively by the students.

Furthermore, the institution's overall reputation may also influence international students' perceptions. A study by the *U.S. News & World Report* found international students

often prioritized the reputation of the institution when choosing to study in the United States. Therefore, institutions with strong reputations may be more likely to receive positive perceptions from international students, regardless of their response to the pandemic (U.S. News & World Report, 2021).

Theoretical Framework

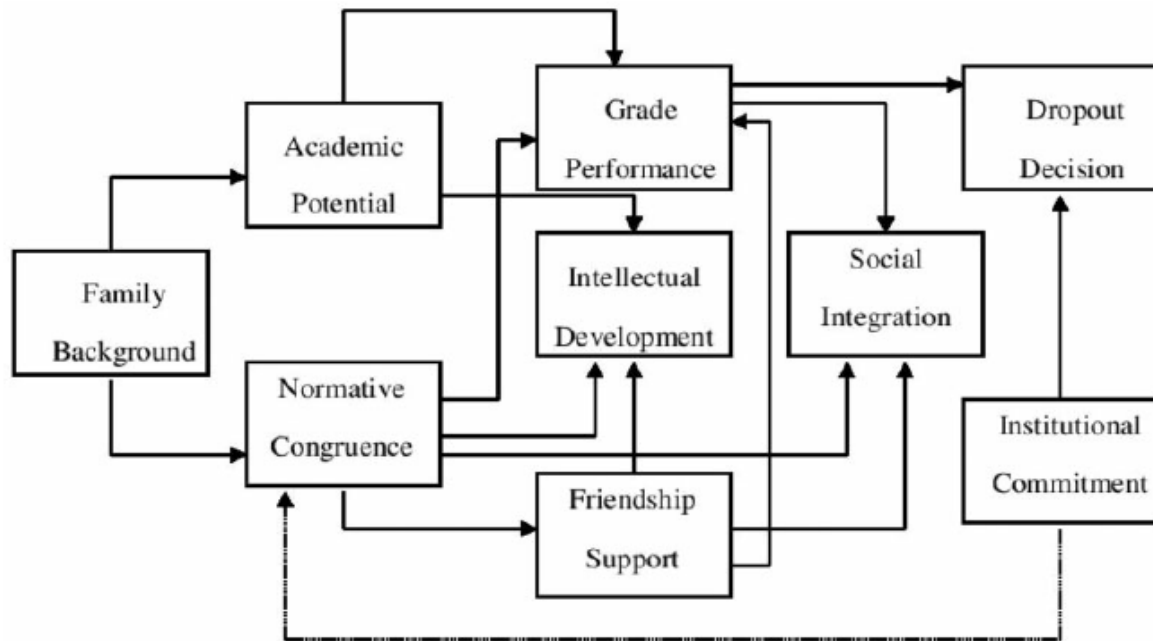
Spady Model

Spady's sociological hypothesis, created in 1970, investigated the causes of low academic achievement and high rates of student attrition. Considerations like these include things like upbringing, aptitude, normative congruence, academic success, intellectual growth, and social support (from family and friends) (Kerby, 2015). As can be seen in Figure 1, the Durkheimian model given by Spady assumes a temporal order and visually represents the presumed direct causal relationships between pairs of variables. The arrow between academic achievement and dropout choice is direct and suggests a necessary and sufficient condition, which is not the case for the other relationships in the model. Those who choose this road have either failed academically or performed poorly enough to be expelled. Here, institutional policy triumphs against the model's theoretical habit. In contrast to the other arrows, the one that is broken depicts a cyclical and malleable pattern rather than a fixed one, leading from institutional commitment back to normative congruence (Kerby, 2015). Spady's model is relevant to addressing the second research question, which seeks to explain how institutional and policy-level factors influence international students' decision to remain enrolled in U.S. HEIs during the pandemic. It explains how institutions may formulate policies to prevent drop-out of international students. The policies should be centered around factors proposed in the model for positive results (Kerby, 2015). Spady's model is also pertinent for the first research question,

which is concerned with the extent to which the COVID-19 pandemic affects the social and academic experiences of international students in U.S. HEIs. The effects of the COVID-19 pandemic can be visualized through the effects on the factors affecting student dropout decisions.

Figure 1

Spady Model

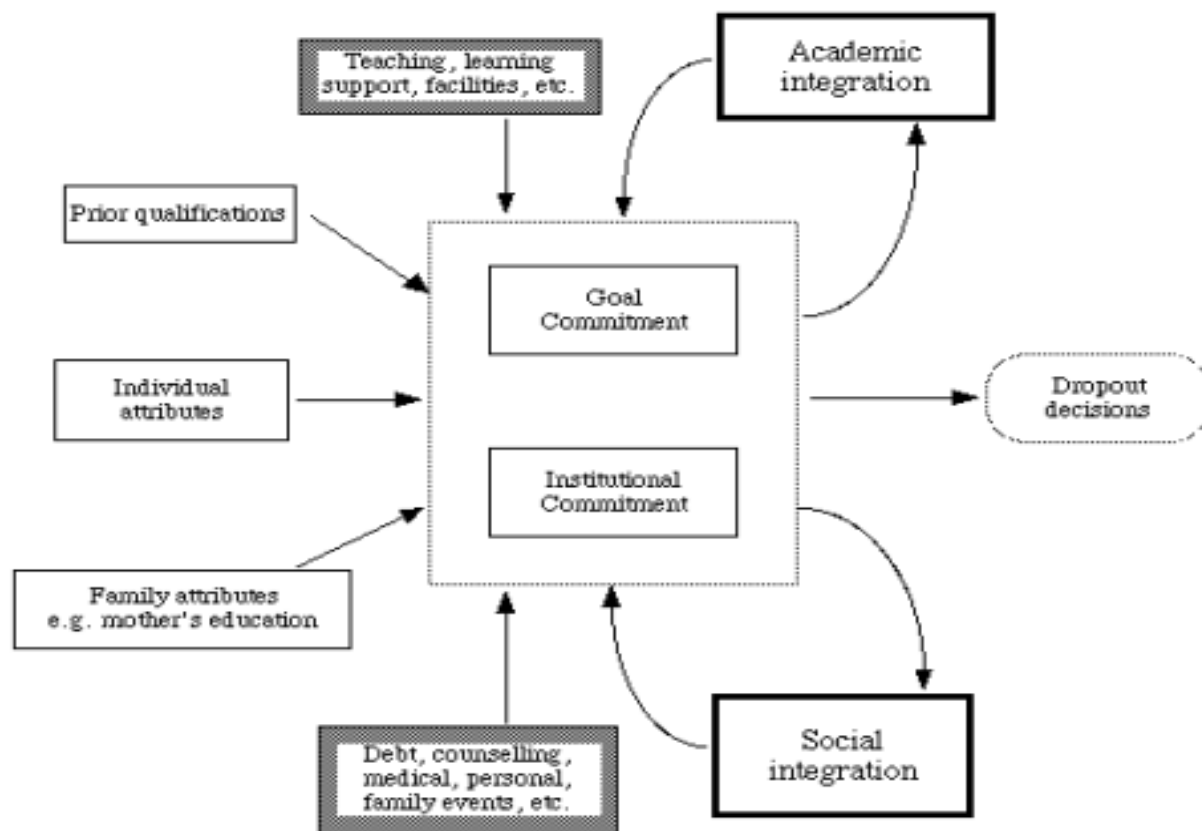


Tinto's Theory

The initial theoretical basis for this research was Tinto's (1975) theory. Tinto amassed a plethora of data on the topic of student retention theory. Tinto (1993) identified three major causes of student attrition. An incomplete education from high school might lead to problems in college. Second, unfinished business in the realms of higher learning and professional development cause student attrition. Thirdly, a failure to participate in campus academic and social activities cause student attrition. Student retention is a key issue for institutions throughout the United States, and Tinto's (1993) theory on student departure is the most often cited theory

for defining the student departure process and why it has stretched to a near paradigmatic position in the domain of higher education (Nicoletti, 2019).

Tinto's (1993) research traced a student's journey from their home life through their time at college and the following circumstances that led them back home again. The first step in the Tinto model of institutional departure is to describe the student's life prior to enrolling in college. Then, Tinto suggested what happens after the pupils enroll in college, emphasizing that their drive to achieve remains unabated (Nicoletti, 2019). The learner plans for the future by considering possible outcomes. The needs of the university determine the expectations placed on students. Students' motivation to do well in school decreases when confronted with this paradoxical reality, to the point where dropping out becomes the only practical alternative (Nicoletti, 2019). The Tinto's integration theory is illustrated in Figure 2. Tinto's integration theory is relevant to addressing the second research question, which seeks to explain how institutional and policy-level factors influence international students' decision to remain enrolled in U.S. HEIs during the pandemic. The model explains factors related to academic and social integration. The factors proposed in the model will guide the meta-analysis.

Figure 2*Tinto's Integration Theory***Chapter Summary**

This chapter provided a review of literature relevant to the study questions and context. The literature on international students' satisfaction with their academic experiences in the United States, international students' perceptions of U.S. HEIs' responses to COVID-19, impact of COVID-19 on international students in the United States and international students' perceptions of U.S. higher education post-COVID-19 was presented. The literature review found international students' perceptions of U.S. HEIs in the post-COVID-19 era may have been influenced by a variety of factors, including international students' satisfaction with their academic experiences, the support provided by their institutions during the pandemic, and the

overall reputation of the institution. Previous studies have provided valuable data on international students' satisfaction with their academic experiences and the support provided by their institutions. Studies have shown international students upheld positive perceptions of U.S. HEIs during the pandemic, with high levels of satisfaction with their academic experiences and the support their institutions provided. The study methodology is outlined in the next chapter.

Chapter 3: Methodology

This section provides the methodological approach used to gather information and to explore factors influencing the retention of foreign learners in the U.S. HEIs during the COVID-19 pandemic. Because a systematic review design was used in the study, this section provides the eligibility criteria used in the selection of articles and journals that formed the basis of this study. This section also discusses the target population of this study, who were primarily international students who studied in U.S. colleges during COVID-19 pandemic, to uncover their perception as well as challenges they faced during the pandemic. This chapter further discusses the study design as well as data collection procedures understanding including appraisal of quantitative and qualitative articles included in this study. This study largely focused on analyzing articles based on interventions and comparison of student's perception on factors enhancing their positivity in engaging with U.S. HEIs as well as challenges before the onset of COVID-19 pandemic and during COVID-19 pandemic. The focus on intervention and comparison studies helped me to determine the absolute evidence on factors affecting the retention of foreign students in U.S. HEIs. In this case, analysis performed helped in understanding students perception before COVID-19 and during the pandemic, thus drawing the eminent challenges that may have hampered retention of foreign students in U.S. colleges as well as understanding challenges faced by international students who remained in the U.S. higher institution following COVID-19 pandemic and the containment measures put in place such as boarder closure, self-quarantining, social distancing, and the need to engage in online learning.

Research Studies Eligibility Criteria

The study was guided by the PICO framework. The PICO framework is used in systematic reviews to create literature search tactics that are both thorough and objective. Using

the PICO framework as a model for constructing a review question guarantees the important parts of the question are properly defined. The PICO framework consists of four main elements: Population (P), Intervention (I), Comparison (C), and Outcomes (O) (Kloda et al., 2020).

Participants/Population

The focus of this study was on international students attending U.S. colleges and universities. While acknowledging the differences in these terms and their subsequent meaning, for this study, the researcher included studies identified was international student experience. The students needed to have been enrolled in their respective HEIs since the onset of the COVID-19 pandemic. No article was excluded from the analysis based on the gender, race, age, academic level, or home country of the students who participated in the studies and/or surveys.

Intervention Types

The study analyzed studies conducted prior to COVID-19 (2014 to 2019), during the COVID-19 pandemic, and in the post-COVID-19 pandemic period. Studies conducted before the COVID-19 pandemic (2019 to 2021) were reviewed to examine the social and academic experiences of international students in U.S. HEIs before the COVID-19 pandemic. Studies conducted during the COVID-19 pandemic were reviewed to identify the challenges international students faced in the United States and the responses HEIs made to tackle issues affecting student retention. Studies conducted in the post-COVID-19 period (2022 to 2023) helped examine factors influencing international students' decisions to remain in U.S. higher learning institutions and the effects of higher learning institutions' responses to the challenges posed by the COVID-19 pandemic.

Comparisons

The social and academic experiences of international students in U.S. HEIs before the COVID-19 pandemic and during the COVID-19 pandemic were compared. This helped to identify the effects the COVID-19 pandemic had on these experiences. The responses to the COVID-19 pandemic that were implemented by U.S. HEIs were also compared to get the best strategies that can address the challenges faced by international students during the COVID-19 pandemic. Comparative analysis of surveys conducted on international students' perceptions of U.S. higher education in the post-COVID-19 era enabled the researcher to come up with appropriate strategies U.S. colleges and universities can implement to retain international students.

Outcomes

To answer the first research question, “To what extent did the COVID-19 pandemic affect the social and academic experiences of international students in U.S. institutions of higher learning?” the study derived themes regarding social and academic experiences. Within these thematic areas, subthemes on the effects of the COVID-19 pandemic on the experiences were derived.

To answer the second research question, “How did institutional and policy-level factors influence international students' decision to remain enrolled in U.S. HEIs during the pandemic?” the study derived themes regarding institutional and policy-level factors. Within these thematic areas, subthemes on the effects of these factors on student retention were derived.

Study Design

I conducted a systematic review of relevant literature. Systematic reviews are in-depth analyses and syntheses of relevant data conducted according to a predetermined set of guidelines.

Usually, this is done by knowledgeable methodologists with the help of subject matter specialists. A systematic review begins with the formulation of research questions. The systematic review entailed the assessment of existing literature, knowledge gaps, and critique (Xiao & Watson, 2019).

Information Sources

The studies relevant to the research questions were derived from journals, conference proceedings, electronic databases of universities and colleges in the United States, research reports from research organizations, and other electronic databases such as JSTOR, ProQuest, ScienceDirect, and Emerald. Google Scholar were used to access webpages over the internet.

Procedures

Search Strategies

I was guided by the research questions while searching for relevant studies to include in the analysis. The search durations were specified in the Google Scholar search customization interface.

Studies conducted between 2014 and 2019 were reviewed to examine the effect of the COVID-19 pandemic on the social and academic experiences of international students in U.S. HEIs. Relevant search titles included international student satisfaction in U.S. colleges and universities, social experiences of international students in U.S. colleges and universities, academic experiences of international students in U.S. colleges and universities, international student satisfaction with U.S. colleges and universities.

Studies conducted between 2019 and 2023 were reviewed to examine the influence of institutional and policy-level factors on international students' decision to remain enrolled in U.S. HEIs during the pandemic. Relevant search titles included: factors affecting international

students' decision to remain enrolled in the United States during the COVID-19 pandemic, higher education policies that affect international students' decision to remain enrolled in the United States during the COVID-19 pandemic, institutional factors that affect international students' decision to remain enrolled in the United States during the COVID-19 pandemic, challenges affecting international students in U.S. colleges and universities during the COVID-19 pandemic, international student satisfaction with U.S. colleges and universities during the COVID-19 pandemic.

Studies conducted between 2019 and 2023 were reviewed to examine the factors influencing international students' decisions to continue pursuing higher education in the U.S. post-COVID-19. Relevant search titles included factors affecting international students' decision to remain enrolled in the United States post-COVID-19, higher education policies affecting international students' decision to remain enrolled in the United States post-COVID-19, institutional factors affecting international students' decision to remain enrolled in the United States post-COVID-19, challenges affecting international students in U.S. colleges and universities post-COVID-19, international student satisfaction with U.S. colleges and universities post-COVID-19.

Study Selection

Study selection was guided by the PRISMA 2009 Flow Diagram (see Appendix B). The stages involved were identification, searching, eligibility assessment, and inclusion.

Data Collection Process

The studies selected related to international students in U.S. colleges and universities. The studies selected were those in which the doctoral supervisors, who were the panel members, did not disagree over their credibility and originality. The findings, conclusions, and

recommendations of the studies reviewed were recorded in the data extraction form. I involved the doctoral supervisors in assessing the methodological validity of the studies selected, which directly affected the validity of conclusions the studies made. The methodology adopted in qualitative studies was outlined clearly to enhance comparability of the results.

Risk of Bias

The bias of individual studies was assessed by examining whether the study conclusions and recommendations were made objectively based on study results. The bias across studies was also assessed by comparing the findings from studies adopting similar methodologies and studies done on the same topical issues but with different methodologies. The bias of quantitative studies adopting predictive models was assessed by verifying if model assumptions were met. For example, tests based on the normality assumption required that data were normally distributed. These bias assessments helped ensure that the risk of bias was mitigated by excluding biased studies from the analysis.

Instruments

Data collection instruments refer to the tools used to collect requisite data. The meta-analysis involved a review of studies that had been done before. Hence, a tool that aided in the summarization of data was required (Clark & Veale, 2018). I used a data extraction form (see Appendix A). The form gathered information on article title, database, electronic link, eligibility criteria, methodology, findings, conclusions, recommendations, knowledge gap, and critique.

Quantitative Data Analysis

Results from quantitative studies were compared on the basis of the methodologies adopted, and results were found. Studies with similar methodologies were compared. Moreover, the robustness of findings was verified by examining whether important statistical assumptions

were tested before running models such as multiple linear regression models and checking outliers and common method bias among other statistical procedures. I also ensured the conclusions made in reviewed studies were valid.

Qualitative Data Analysis

Qualitative studies that were included were analyzed thematically. Results of the studies were inputted into the data extraction form, and the summarized text of all the documents was inputted into MAXQDA software. The accuracy of the qualitative findings was verified through panel reviewers giving their views. Moreover, triangulation was done to verify the validity of findings from various sources.

Limitations of the Study

Limitations existed that were beyond my control. First, the articles employed in the analysis may not have been exhaustive or complete. This was because content on the internet kept changing. Moreover, some studies may not have been available on the internet because they had not been published online. Hence, the studies I analyzed may not have represented the entire set of studies relevant to the research questions. Secondly, all potential risks for bias may not have been mitigated in a secondary review of qualitative studies. Thirdly, the applicability of the research to other contexts outside the United States was limited due to contextual differences.

Delimitations of the Study

The study focused on international students in U.S. colleges and universities as the study problem and objectives were limited to the United States. Hence, studies done in colleges outside the United States were not considered. Moreover, those studies focusing on noninternational students were not considered. The present study did not conduct a primary qualitative or quantitative study because of the vastness of the United States, which made it hard to collect

information from students reliably, given the financial resources and time available. Moreover, I did not personally contact the authors of academic studies where potential bias would be suspected because it would be hard to get information that could lead to the detection of the bias.

Chapter Summary

This chapter presented research studies eligibility criteria (PICO framework), study design, information sources, procedures, quantitative and qualitative data analysis, limitations, and delimitations for this study. The next chapter will present the analysis of results and findings.

Chapter 4: Findings

In this chapter, the researcher present the findings of the study on factors influencing the retention of foreign learners in U.S. HEIs during the COVID-19 pandemic period. The study identified the unique challenges international students faced while coping with the pandemic in the United States. Additionally, I examined some key interventions HEIs should implement to ensure positive experiences for international students and to address existing challenges effectively.

The studies included in the analysis provided insights into the impact of the COVID-19 pandemic on international students' enrollment and retention in U.S. HEIs and focused on two main research questions:

1. To what extent did the COVID-19 pandemic affect the social and academic experiences of international students in U.S. HEIs?
2. How did institutional and policy-level factors influence international students' decision to remain enrolled in U.S. HEIs during the pandemic?

Study Retrieval

Electronic databases were used as the primary platform of retrieving literature sources reviewed in the study to achieve the study purpose. In this case, the study large focused on electronic databases such as JSTOR, Science Direct, Google Scholar, Emerald, and other electronic databases to determine eminent sources relevant to the study topic. By using the search criteria and the keywords, several articles, journals, and publications were noticed. In this case, the retrieval strategy was based on the inclusion and exclusion criteria as well as ensuring the article was relevant to the study topic. For instance, I first looked at the publication year of the article to determine whether it falls within the inclusion criteria as aforementioned. In this

case, articles that did not fall under the inclusion criteria were excluded. For articles I selected for inclusion, the abstract was scrutinized against the PRISMA appraisal method to determine articles that accurately met the present research standards. It is after the appraisal that the whole article was downloaded, reviewed, and analyzed against the study questions and objectives.

Table 4

Number of Sources in PRISMA Stages

PRISMA Stages	Approximate Number of Sources
Identification	170
Screening	90
Eligibility	55
Inclusion	32

Inclusion Characteristics

To ensure the selection of pertinent information for the study, I implemented a rigorous process of identifying and filtering data through the application of inclusion and exclusion criteria. To accomplish this, a comprehensive search was conducted using both keyword and key-phrase search techniques across various electronic databases, as well as through popular internet search engines.

The initial step involved formulating a list of terms associated closely with the core themes under investigation. These terms served as the foundation for the subsequent search process. By employing the designated search methods, I sought to uncover relevant literature, studies, and resources aligned with the study's central topics.

During the search, I assessed identified themes carefully for their direct relevance to the research inquiry. I deemed themes demonstrating a clear and meaningful connection to the research focus appropriate for inclusion because they possessed the potential to contribute

valuable insights and information to the study. On the other hand, themes lacking direct relevance or failing to provide substantial value to the research were excluded from the selection process.

By implementing a systematic approach that prioritized the inclusion of themes that directly related to the research topic, I ensured only the most relevant and significant information was included in the study. This meticulous process of filtering and selecting themes aimed to enhance the quality and precision of the research findings, ultimately contributing to the overall validity and reliability of the study's outcomes.

Data Summary

Table 5

Table of Journals and Themes

Research question/objectives	Key themes/focus areas	Findings – Key issues	Relevant literature
1. To what extent did the COVID-19 pandemic affect the social and academic experiences of international students in U.S. institutions of higher learning?	1.1 International student mobility	Impact of travel restrictions on international students' ability to enter or return to the United States. Disruptions in study abroad programs and exchange opportunities. Decreased financial support due to economic challenges faced by international students and their families	Bilecen, 2020 Mason, 2021 Baer & Martel, 2020 American Council on Education, 2020 DiMaria, 2020 Warren & Skillman, 2020 Yildirim et al., 2021 Yu, 2021 Martel, 2020
	1.2 Financials	Reduction in scholarships, grants, and part-time job opportunities.	Purcell & Lumbreras, 2020 Buckner et al., 2022 Dennis, 2020
	1.3 Reimagining internationalization	Shift toward virtual and remote international experiences. Limited cultural immersion and cross-cultural interactions.	Purcell & Lumbreras, 2021 Cai et al., 2021

		Challenges in building social networks and sense of belonging.	
1.4 Changes in instruction delivery mode	Transition to online learning formats. Variations in the quality of online instruction. Difficulties adapting to virtual learning environments and technology platforms.	Purcell & Lumbreras, 2021 Sharaievska et al., 2022 Mbous et al., 2022 Benito et al., 2021 Alam & Parvin, 2021 Slavin & Storey, 2020	
1.5 Changes in schedule and everyday life	Disruptions in academic calendars and course schedules. Changes in housing arrangements and limited access to campus facilities. Impact on mental health and well-being due to isolation and lack of social interactions.	(Sharaievska et al., 2022) (Mbous et al., 2022) Powell et al., 2021 Soldavini et al., 2021	
1.6 Increased technology use	Dependence on digital tools for communication, learning, and accessing resources. Challenges related to internet connectivity, access to devices, and digital literacy.	Sharaievska et al., 2022 Squire, 2022 Rassudov & Korunets, 2020	
1.7 Negative reaction to changes in higher education	Frustration and dissatisfaction with the quality of online education. Sense of disconnection and disengagement from the learning experience. Perceived devaluation of degrees and educational outcomes.	Sharaievska et al., 2022 Al-Mawee et al., 2021 Browning et al., 2021 Lederer et al., 2020 Purcell & Lumbreras, 2021	
1.8 Positive reactions to changes in higher education	Appreciation for the flexibility and convenience of online learning. Recognition of new skills and adaptability developed during the pandemic.	Sharaievska et al., 2022 Al-Mawee et al., 2021	

		Opportunities for self-directed learning and personalized approaches to education.	
2. How did institutional and policy-level factors influence international students' decision to remain enrolled in U.S. HEIs during the pandemic?	2.1 Residency challenges	Issues related to visa processing and renewals. Uncertainty and anxiety regarding immigration policies and restrictions. Concerns about the ability to maintain legal status and potential consequences of noncompliance.	Mbous et al., 2022 Buckner et al., 2022
	2.2 Institutional structure	Supportive policies and practices implemented by universities. Availability of resources and services for international students. Effectiveness of communication and engagement strategies.	Mbous et al., 2022
	2.3 Institutional leadership	Role of university administrators in addressing the needs of international students. Decision-making processes and responsiveness to changing circumstances. Collaborative efforts with government agencies and international student organizations.	Purcell & Lumbreras, 2021
3. Factors influencing international students' decisions to continue pursuing higher education in the U.S. post-COVID-19	3.1 Financials	Affordability of tuition and living expenses. Availability of scholarships, financial aid, and work opportunities. Perceived return on investment and career prospects.	Purcell & Lumbreras, 2021 Martirosyan et al., 2022 Meier et al., 2022
	3.2 Positive environment	Inclusive and supportive campus culture. Sense of belonging and community engagement.	Bilecen, 2020 Sustarsic & Zhang, 2022

		Opportunities for cultural integration and cross-cultural learning.	Godfrey & Yu, 2021b Udah & Francis, 2022 Tran, 2020 Charoensap-Kelly & Punyanunt-Carter, 2022
	3.3 Online learning	Flexibility and accessibility of online education. Quality of online instructional delivery and engagement strategies. Technological infrastructure and support for virtual learning.	Purcell & Lumbreras, 2021 Neuwirth et al., 2021 Aguilera-Hermida et al., 2021

Analysis of Themes

Extent to Which the COVID-19 Pandemic Affected International Students' Social and Academic Experiences in U.S. HEIs

International Student Mobility

Existing inequities have been compounded by the COVID-19 epidemic, which has touched every area of life. The world of higher education has undergone a dramatic change due to the rapid use of digital technologies in the classroom. Classrooms, labs, residence halls, and cafeterias usually bustling with activity were deserted when authorities ordered their evacuation. Schools halted commencement ceremonies to avoid spreading the infection (Bilecen, 2020). Even while local students could return home to their families, not all foreign students could due to restricted borders and canceled international flights. Many were isolated on campuses and in locked-down cities, worried about their personal safety and the safety of loved ones who reside abroad (Bilecen, 2020).

During a worldwide epidemic, overseas students have been worrying about their health, their future, and the safety of their families. They were also isolated from their peers. Most overseas students work either on or off campus to help pay for their education and living expenses. Many student jobs were lost during the global health crisis, including those in pubs, restaurants, and libraries, leaving (foreign) students worried about money (Bilecen, 2020). It is important to remember that sending a child away to school is a major financial and emotional commitment for the whole family. Being unable to travel home if anything happens to their families or vice versa has undoubtedly made students more apprehensive, even if they were already utilizing online communication modes to remain in contact with their transnational families and get emotional support. Many families must have struggled to provide for their children throughout the crisis since the vast bulk of international student movement occurs from the Global South to the Global North (Bilecen, 2020).

The number of international students studying in the world's top host nations fell overall during the 2020–2021 school year. There was a wide range of losses in foreign student enrolment across the top five host nations, from almost 20% to a minor drop (Mason, 2021). In the autumn of 2020, there was a 16% drop in the overall number of foreign students enrolled in U.S. HEIs and online international programs (Baer & Martel, 2020). Higher education executives and scholars projected an immediate and drastic reduction in foreign student enrolment due to the pandemic, but the actual decline was less severe than expected (American Council on Education, 2020; DiMaria, 2020).

Administrations have implemented limits on human connections, and individuals have altered their behavior voluntarily in reaction to the COVID-19 epidemic. These measures are being taken to minimize the spread of SARS-CoV-2, the coronavirus that causes severe acute

respiratory syndrome. Mobility has drastically decreased in the United States and throughout the world. Significant decreases in mobility have been seen in the United States after the advent of the COVID-19 threat and the implementation of certain government guidelines (Warren & Skillman, 2020).

Major problems arising during COVID-19 were the shutdowns and limits on students' physical movement. A significant shift has occurred on a worldwide scale in the migration of foreign students (Yildirim et al., 2021).

Because of the unbalanced and hierarchical nature of the global setting, the United States has been at the forefront of internationalizing higher education in a variety of ways, the most important of which is the recruitment and enrolment of international students. The usual mobility experience was severely impacted by the COVID-19 epidemic (Yu, 2021). The demographic makeup of U.S. universities is being affected by this scenario. Chinese students are slowly losing interest in studying in the United States as they get disillusioned with the country's glorified fantasy. The Chinese students are also anxious about the country's unpredictable policies. Moreover, they are concerned about their own safety. Singapore and Hong Kong are growing as alternatives to the United States as a study destination for Chinese students (Yu, 2021).

The health crisis caused by COVID-19 disrupted the movement of overseas students this school year and maybe for years to come. U.S. HEIs are going to remarkable lengths to ensure their students are kept abreast of breaking news. This guarantees the security of the campus for overseas students. It guarantees the academic achievement of foreign students studying abroad and increases the diversity of the countries' study-abroad populations (Martel, 2020).

Financials

People expected that student enrollment would fall by 5% to 20% at several U.S. universities and colleges in the fall of 2020. Consequently, a loss of 5% to 13% in net tuition and auxiliary revenue per student in 2021 was anticipated. Since the macroeconomic situation limits most U.S. HEIs' revenue-generating tactics, many will resort to de-costing. Because salaries consume over 70% of university expenditures in the United States, a major reorganization of teaching personnel is likely. Before the COVID-19 crisis, most U.S. HEIs had underinvested in online education, digital strategy, and the implementation of institutional reform. Between the middle of March and the middle of July 2020, 11 HEIs in the United States announced closure intentions or declared exigency due to declining enrolment (Purcell & Lumbreras, 2020).

Many foreign students choose to study in the United States. However, the government shut its borders in March 2020 because of the spread of COVID-19. In terms of enrollment, COVID had a negligible effect on foreign student enrollment levels throughout the country. The fact that selective institutions seem to have been less affected than access-oriented institutions is a troubling trend (Buckner et al., 2022).

COVID-19 hastened the drop in enrolment of foreign students. The fall in the number of overseas students studying in the United States before COVID-19. There had already been a decline in the number of foreign students enrolling in U.S. HEIs prior to the spread of COVID-19 because of political, economic, and social changes (Dennis, 2020). The number of Chinese students studying in the United States decreased by 7,774 between March 2018 and March 2019. South Korean, Brazilian, Mexican, and Canadian students registered at lower rates in the spring of 2019 compared to the spring of 2018. According to the data, the United States has suffered a decline in its share of the global student market for a long time now (Dennis, 2020).

Reimagining Internalization

As the epidemic spread, universities and institutions took swift action to ensure the safety of their overseas students. Some foreign students were left stranded since their home nations had shut down their airports to incoming planes. The situation in the United States has worsened due to recent changes to visa laws, work-authorization standards, and border controls. There is still a lot of uncertainty to work through, from visa difficulties to concerns about racist conduct and nationalist discourse in particular places (Purcell & Lumbreras, 2021). The global health emergency might be a turning point in the process of globalization. In a future without mobile devices or one where mobility is severely constrained, internationalization must be rethought, redesigned, and reimagined. The presence of foreign students and professors has come to be seen as synonymous with internationalization. This myopic viewpoint, however, disregards the significance of international partnerships fostered via pedagogy, scholarship, and service (Purcell & Lumbreras, 2021).

Prior to the COVID-19 pandemic, international collaborations often included the sharing of expertise through the participation of students in seminars, symposia, and conferences. COVID-19 taught us, however, that many of the present face-to-face contacts with a wide range of stakeholders from the commercial sector, residents, mayors, etc., could be done more quickly and effectively through teleconferences like webinars or meetings. As HEIs continue to face the problems COVID-19 posted, it is anticipated that cross-border, collaborative learning will become more of a priority soon (Purcell & Lumbreras, 2021). In the future, it is expected that there will be a new sort of collaboration in which resources like data, studies, and even money are pooled for the common good of children, schools, and neighborhoods (Purcell & Lumbreras, 2021).

Although worldwide cooperation in coronavirus research has improved since the early months of the global COVID-19 pandemic, it still displays abnormal patterns relative to coronavirus research before the pandemic (Cai et al., 2021). Countries with the highest infection rates also tend to be the ones that create the most coronavirus-related content. Fewer countries and smaller teams are participating in COVID-19 research compared to pre-COVID research, and this tendency is expected to worsen as the pandemic progresses (Cai et al., 2021). Despite China's dominance in the publishing output during the early months of the pandemic, China's contribution has decreased as the national COVID-19 caseload has decreased, with the United States being the primary contributor. As the epidemic drags on, cooperation between China and the United States dwindles, either because of China's decreased publishing rate on the issue, perhaps because of political hurdles, or perhaps for both of these reasons (Cai et al., 2021).

Changes in Instruction Delivery Mode

HEIs throughout the United States implemented distance education successfully in a couple weeks because participants were committed to giving it their all and were willing to learn from their mistakes. Although redesigning Indiana University's homepage took 10 months of preparation, Tulane University's new site went up in only 2 weeks (Purcell & Lumbreras, 2021). The industry has reacted by adopting digital pedagogy and online courses, although this was not planned. Although many students and businesses favor online learning, some teachers prefer tried-and-true techniques because they feel more at ease with them (Purcell & Lumbreras, 2021).

Beyond concerns about lower income students' restricted access to technology, there is some evidence that the shift to online schooling is not equal in terms of learning opportunities. The transition to online delivery is challenging for both the students and faculty. Teachers need

special preparation for the pedagogy of online education because it differs significantly from that of traditional classroom instruction (Purcell & Lumbreras, 2021).

Some students may have had their courses canceled or rescheduled, but most were forced to enroll in distance learning. Many learners considered their chances of succeeding in an online learning environment and pondered the quality of the education they would obtain. It was unclear to the students how well they would adapt to an online learning environment. Online learning affected their graduation dates and locations of residence (Sharaievska et al., 2022).

Initially, the pandemic caused a change in the teaching paradigm that resulted in the closure of labs, the suspension of research participant recruitment, the postponement of research and the extension of graduation dates (Mbous et al., 2022).

Benito et al. (2021) detailed three institutions' preparations for the switch to remote emergency delivery during the COVID-19 pandemic. The research combined many methodologies, such as questionnaires filled out by teachers and students and group discussions. Findings from this research highlighted the need to strengthen the digital components of future learning experiences in higher education and indicate students are generally pleased with emergency remote delivery. Among all respondents, hybrid learning was overwhelmingly favored. When the new normal arrives, participants advised institutions on what they should preserve for the benefit of both students and teachers (Benito et al., 2021).

Supporters of technology-mediated online education argue it may improve society, while opponents say it has not resulted in graduates who are prepared for the workforce (Alam & Parvin, 2021). Alam and Parvin (2021) compared the academic and professional outcomes of two cohorts of recent college grads. Before the COVID-19 epidemic, one group learned together in person, while the other learned together online. Primary data are acquired by an empirical

survey of 120 students in each group, while official secondary statistics are collected from the sampling institution. In contrast to those who lived during the epidemic, those who lived before it had low academic outcomes, according to the findings (Alam & Parvin, 2021). Although both groups performed well academically, there was a difference in their results on tests of aptitude and practical experience required for entry-level employment. Pre-COVID-19 students outperformed their contemporaries on measures of occupational preparedness. There is no direct correlation between academic success and work readiness. According to these results, online learning has made education considerably more passive, whereas higher education is not very active from a labor market standpoint (Alam & Parvin, 2021).

The federal and state reaction to COVID-19 and preparations to resume schools in the fall have stressed flexibility and adaptability due to the country's vast geographical and socioeconomic variety (Slavin & Storey, 2020). However, remote (online) learning has exposed and worsened preexisting racial and economic inequities in the United States in terms of access to technology, student involvement in the classroom, and communication between teachers and parents. As schools try to reopen, pupils still face challenges, including unequal access to education, learning loss throughout the spring and summer months, and the possible spread of the influenza strain COVID-19 among the most vulnerable populations (Slavin & Storey, 2020).

Changes in Schedule and Everyday Life

According to student surveys, the COVID-19 epidemic prompted both positive and negative behavioral changes. Some students complained about having less time for themselves and finding it difficult to strike a new work–life balance. Such shifts in habits and schedules may result from the pandemic's high stress, isolation, and dread of the unknown, or they may have the opposite impact. Stress, restlessness, and difficulty in concentrating may increase due to the

disruptions to regular patterns. Some students have said keeping to their routines helps them emotionally. Although some students had no trouble establishing and sticking to their new habits, others struggled (Sharaievska et al., 2022).

Canceling or avoiding social gatherings and the apparent lightheartedness with which social distance measures were adopted had adverse effects on interpersonal relationships. Since the epidemic made it impossible to go out together, strong friendships and family ties deteriorated. Others were forced to spend their free time working or studying since they could not meet up with pals at restaurants or bars after work (Mbous et al., 2022).

College students throughout the United States experienced significant interruption because of the COVID-19 pandemic (Powell et al., 2021). Powell et al. (2021) studied the effects of the COVID-19 pandemic on the eating habits of students from a prominent university in the United States who had to relocate from their homes. The research provided explanations for these shifts. Many students in this survey said they ate quite differently off campus during the epidemic compared to when they were in school. Several students reported changes to their diets, including increased snacking. The responsibilities people play in the home and the accessibility of food were significant determinants in determining what people ate (Powell et al., 2021). Most students were back at home with their families, and many of them participated only passively in the activities that influenced their eating choices. Students often ate what was made available to them by their parents, who would shop for and prepare meals. Some students' increased free time led to boredom and snacking, whereas for those kids with more abilities and/or agency, extra free time was utilized to plan and prepare nutritious meals. About one third of students said they ate differently at home since they could not go to the shop, buy perishable food, or purchase groceries because of the pandemic (Powell et al., 2021).

Since the beginning of the COVID-19 pandemic, food insecurity has become more widespread in the United States (Soldavini et al., 2021). Soldavini et al. (2021) conducted a cross-sectional online survey among undergraduates at a prominent public institution in the Southeastern United States. From the beginning of the Spring 2020 semester, before the COVID-19 pandemic, until the end of the semester, during the pandemic, the total frequency of food insecurity rose by around a third. Twelve percent of students saw an improvement in their food security situation, 68% saw no change, and 20% saw a worsening (Soldavini et al., 2021). Several factors predicted whether a person's food security would increase or decrease from before to after the epidemic. Overall, the percentage of college students in our sample who went hungry rose during the COVID-19 epidemic, according to the report. Nonetheless, the food security of some pupils has improved (Soldavini et al., 2021).

Increased Technology Use

Students have reported an increase in their usage of technology, such as screen time, online/Zoom time, and phone/laptop use, all due to the shift to online education. Modern technology enhanced the social lives and educational opportunities of students. A lot of students said they used their laptops as a way to relax and unwind (Sharaievska et al., 2022).

Worldwide, during COVID-19, classrooms went online with remarkable speed. By looking at how young people use technology, the researcher could see where there are major gaps in the U.S. school system. There are also disconnects between the technology used in virtual education and those pupils are likely to be familiar with from their personal life. The dispersed education infrastructure that facilitates online learning and organizes students' knowledge work is more common in wealthier areas (Squire, 2022). Material, human, and structural capital comprise this home and school technological infrastructure, which aids young

people's growth as budding knowledge workers. Youth activity is kept inside the confines of the school due to the usage of technology during virtual education. Students' agency in virtual classrooms, such as in establishing learning objectives or providing course materials, is limited (Squire, 2022). Technology usage at home for either study or enjoyment is driven by the individual's own interests and portrays users as proactive explorers of knowledge and network builders who rely heavily on tools like Discord, a participatory learning platform, to carry out these tasks. Play, emotive design, participatory communications, location-based learning, embodied understandings, and creative creation may all find a home in the classroom if students spend more time studying online (Squire, 2022).

The epidemic of COVID-19 has affected every facet of human life. Forced self-isolation, restricted borders between and within nations, and a lack of opportunity to implement new technology into daily life all contribute to the drive toward digitalization (Rassudov & Korunets, 2020). In light of the present paradigm shift away from the conventional learning process, Rassudov and Korunets (2020) emphasized the profound effects on engineering education. The biggest obstacle is providing them access to genuine engineering gear they cannot get at home. After the pandemic is ended, the quality of professional training may be improved, and the issue of hardware unavailability can be mitigated in part via the use of Digital Twins for industrial equipment (Rassudov & Korunets, 2020).

Table 6*Summary of Themes*

Themes	Key Findings
International student mobility	<ul style="list-style-type: none"> • The pandemic compounded existing inequities and disrupted international student mobility due to travel restrictions and canceled flights. • Many international students were isolated on campuses and faced financial concerns. • The number of international students decreased during the pandemic.
Financials	<ul style="list-style-type: none"> • Institutions expected enrollment and revenue losses due to the pandemic. • Institutions relied heavily on tuition revenue, leading to cost-cutting measures, including reorganizing teaching personnel.
Reimagining internationalization	<ul style="list-style-type: none"> • The pandemic led to uncertainty for international students due to changes in visa laws, work authorization, and border controls. • The crisis prompted a need to rethink and redesign internationalization efforts.
Changes in instruction delivery mode	<ul style="list-style-type: none"> • Universities rapidly shifted to online learning, highlighting challenges in both student and faculty adaptation. • Online learning exposed inequalities and raised concerns about learning quality and workforce preparedness.
Changes in schedule and everyday life	<ul style="list-style-type: none"> • The pandemic caused disruptions in routines and schedules, affecting student habits, relationships, and eating habits. • Some students found it challenging to adapt, while others coped well.
Increased technology use	<ul style="list-style-type: none"> • Online education led to increased technology use, including screen time and virtual communication. • Technological gaps existed, impacting access to education and student agency in learning.

Negative Reaction to Changes in Higher Education

More than half of replies reflected on detrimental emotional or emotion-related consequences that harmed students' ability to achieve due to changes in instructional delivery modality and resource availability. Many students have voiced anxiety and apprehension when asked about transitioning to an online education. Some of the unfavorable results were sluggishness, procrastination, and diminished productivity, motivation, attention, and ability to

learn. The future was also a major source of anxiety for students, along with projects, grades, and the ability to handle the heightened demands of online education (Sharaievska et al., 2022).

Several pupils' performance suffered due to disruptions and inadequate study space. One of the factors that hinder productivity is a lack of regularity and scheduling. Many pupils were unfocused and unproductive due to a lack of drive. A few of the students attributed their lack of effort to feelings of apathy and anxiety (Sharaievska et al., 2022).

Concerns about their ability to study in online settings, work effectively in groups, get excellent marks, satisfy the increasing standards of online education and be successful in the future were cited by students, along with declines in motivation and attention. Many students complained they could not remember what they had learned in an online class. Most students who took part in the survey noted taking classes online was neither their first nor second option of learning (Sharaievska et al., 2022).

Students were also affected by mental health and personal challenges. Mental problems exhibited by students included worry, fear, stress, anxiety. Personal problems that affected international students were relationship dynamics, a feeling of belonging and uncertainty which contributed to a negative mood, as did concerns about friends and family back home, homesickness, loneliness, a lack of motivation, concentration, and productivity (Sharaievska et al., 2022).

The increased adoption of remote learning in the United States because of the COVID-19 epidemic has made it compulsory to examine students' experiences, viewpoints, and preferences (Al-Mawee et al., 2021). Due to the revolutionary shift in the educational system, Al-Mawee et al. (2021) highlighted students' views and preferences on online education. To do this, a case

study of Western Michigan University is used. In Al-Mawee et al.'s study, students were asked about their good and bad experiences with distant learning.

Students in higher institutions of learning generally experienced higher rates of anxiety, melancholy, drug misuse, and eating disorders during the COVID-19 pandemic. Web-based surveys were used to obtain cross-sectional data from seven different colleges and institutions in the United States (Browning et al., 2021). Students were invited to fill out the surveys using both random and stratified sampling methods between the middle of March and the beginning of May 2020, when most coronavirus-related shelter-in-place orders were in force. Females, non-Hispanic Asians, those with fair to poor health, those from low-income households, and those who knew someone infected with COVID-19 all had greater psychological effects than their male counterparts (Browning et al., 2021). Researchers observed pupils from higher socioeconomic backgrounds and those who identify as non-Hispanic White were less likely to have unfavorable psychological consequences. Those who spent fewer than 8 hours a day in front of electronic devices were also shown to have lower rates of negative psychological impacts, as did those who spent at least 2 hours a day outdoors. Greater psychological harm was shown to be associated with being female, being of fair or poor overall health, being between the ages of 18 and 24, spending 8 or more hours a day in front of a screen, and having intimate knowledge of an infected individual (Browning et al., 2021).

Some students complained that the services and facilities usually available to them at their institution were no longer available. Students cited access to the internet and other academic resources, as well as the assistance of teachers and tutors, possibilities for peer learning and group projects, access to laboratories and libraries, and the chance to do original research. It was difficult, if not impossible, to supply the supplementary resources and opportunities

highlighted by students via online channels, despite institutions making various adjustments and enhancements to their functioning throughout the pandemic (Sharaievska et al., 2022).

The shift toward online learning has been linked to less supervision from teachers. Some students complained they got less out of their school experience because they did not get to know their teachers well enough. Other students complained online learning made it difficult for them to get personal feedback and direction from teachers. Students' decreased access to university resources also contributed to a decline in academic support and tutoring. In addition, students were deprived of the chance to collaborate with their contemporaries (Sharaievska et al., 2022).

Because of the shift to online learning, there were less possibilities to do research. Due to these shifts, students found it more difficult to schedule time with faculty advisers, form new partnerships, and get access to necessary tools. Some students switched subjects because they could not get the info they needed. Other resources, such as quiet space and access to library materials, were listed, in addition to those influencing students' ability to thrive in school. Some students also found they no longer had access to the fast and dependable internet that had been readily accessible on campus. Due to the sluggishness of the internet, several students experienced delays in completing their work. Internet problems caused some pupils to drop out of school (Sharaievska et al., 2022).

Student events and experiences, such as study abroad trips, internships, and graduation ceremonies, have been canceled, postponed indefinitely, or moved to virtual formats, leaving many students dejected about unrealized personal and professional milestones. Class trips and service learning, membership in extracurricular organizations, and attendance at social events, all of which foster camaraderie among students and a sense of belonging to the university, have been cut or forced to be conducted online due to budget cuts (Lederer et al., 2020).

Sending students and faculty home in the United States was a reasonable response to the urgent COVID-19 danger. In nonresidential colleges and universities, safe environments and a scholarly community may be fostered via the provision of learning resources and social spaces. Some of the children and teachers in the United States had nowhere to go because they were homeless. Others had trouble getting online because they had the necessary equipment and or connection, and they had nowhere quiet to study since most libraries, cafés and other public venues in the United States were closed during the lockdown (Purcell & Lumbreras, 2021).

Positive Reactions to Changes in Higher Education

Although many students lamented the hardships of adapting to higher education reforms after the epidemic, others saw the opportunities they presented. Some students reported feeling relieved of anxiety, worry, and time pressure. Others said they were successful or found new motivation. Due to less regular responsibilities, several students discovered they had more time for themselves. Some students said they were healthier and happier after receiving more free time. Other students also noted more opportunities to prioritize personal wellness. One of the benefits of the epidemic was the increased availability of free time for recreational pursuits. Students who had more time for themselves also reported feeling more well-rounded (Sharaievska et al., 2022).

It is crucial to examine students' experiences, viewpoints, and preferences since the use of remote learning has increased in the United States because of the COVID-19 epidemic (Al-Mawee et al., 2021). Due to the revolutionary shift in the educational system, Al-Mawee et al. (2021) highlighted students' views and preferences on online education. To do this, a case study of Western Michigan University is used. Participants in this study conducted an online survey that looked at two dimensions: instructional strategies and remote learning. Many students liked

the convenience of being able to study at their own pace and from any place. These results may be useful to Western Michigan University and other universities in their efforts to enhance distance learning programs (Al-Mawee et al., 2021).

How Institutional and Policy-Level Factors Influenced International Students' Decisions to Remain Enrolled in U.S. HEIs During the Pandemic

Residency Challenges

Significant barriers to foreign students' ability to settle into their new home country may be broken down into three broad categories: bureaucratic red tape, visa regulations and relocation. It may be frustrating to work with the American bureaucracy because of all the red tape and the inconsistent answers you get from various departments (Mbous et al., 2022).

The U.S. government shut down permanently on July 6, 2020. Nonimmigrant students enrolled in online Fall 2020 courses were granted temporary exemptions by the Immigration and Customs Enforcement (ICE) department. Nonimmigrant F-1 and M-1 students attending fully online institutions were most affected by these restrictions because they were prohibited from carrying a full online course load while staying inside U.S. territory. Exemptions also made it impossible for international students enrolled in 100% online programs to get visas. Although these waivers were largely reversed within 2 weeks of their introduction, they caused significant anxiety for overseas students at the time (Mbous et al., 2022).

Although these limitations were partially lifted, students still had to wait longer than expected to get their U.S. visas since embassies in certain countries were closed or operating at reduced capacity. International students could not return home for their traditional summer break and renew relationships with friends and family due to the quarantine imposed to prevent the spread of COVID-19 pandemic (Mbous et al., 2022).

Federal laws for student visas in the United States mandated continuous physical presence in the country for overseas students. The existence of the tough federal laws was the result of the Trump Administration's increasingly aggressive posture toward immigration (Buckner et al., 2022).

Institutional Structure

Several variables mitigated the impact of lifestyle and residence difficulties on unpleasant emotions. The university's organizational structure had a role since it influenced other aspects of the educational system, including the presence or absence of action, the clarity of directions and structural guidance, and the concentration of power (Mbous et al., 2022).

Relationships with instructors were critical as students struggled to adapt to new work and course schedules. For some, the burden of maintaining special mentor-mentee bonds increased. Most exchange students praised their instructors for being kind and flexible in areas such as grading flexibility and meeting times. Even with the continued epidemic, demands for productivity did not change. Students from other countries hoped their schools would adapt some of their academic requirements in light of the pandemic's probable harmful impact (Mbous et al., 2022).

Concerns about inaction, lack of direction and structure, and excessive concentration of power were shared by international students. Some foreign students, worried about their safety, expressed gratitude to their departments and the university's Global Affairs Office for their efforts to keep the campus secure. Some teachers were sympathetic to international students (Mbous et al., 2022).

International students cited a lack of structure as a contributing factor to the absence of direction and misalignment of objectives at the department level. This refers to there not being a

clear system in place to deal with their complaints beyond what was provided on a departmental level (Mbous et al., 2022).

Institutional Leadership

Higher education administrators in the United States were already dealing with a challenging reality before the pandemic hit: budget cuts, campus strife and widespread concern about students' and taxpayers' lack of satisfaction with their returns on tuition, loans, and degrees. Prior to the crisis, they had to contend with shifting demographics, unequal access to resources that led to inequities in student outcomes, a lack of diversity among faculty, and increased public anxiety about high student debt and an unemployed or underemployed graduating class. Many of these concerns were made worse, and new dangers to universities' economic models, brands, and civic obligations were introduced by the COVID-19 pandemic. Most people know the potential downsides and upsides to each crisis, but only the most cynical leaders have been ready to declare reductions in spending and personnel (Purcell & Lumbreras, 2021). Most leaders responded more calmly. They improvised solutions to the situation, which ultimately shaped the new system. They were worried about reopening in the autumn, and their choices may have had fatal results (Purcell & Lumbreras, 2021).

Leaders gained insight into the unique ways in which people were affected by the COVID-19 situation, allowing them to respond appropriately. Institutional leaders promoted two-way communication by reaching out to a broader network of alumni, civic and corporate leaders, and colleagues at other educational institutions. Strategic investments and initiatives to maximize efficiency and effectiveness are considered when top executives revise the budget. They are aware that reactive decosting may lead to depreciation in the long run. Those who saw the crisis as a financial catastrophe acted in the short term (Purcell & Lumbreras, 2021).

Most leaders have responded to the COVID-19 situation by taking a human-centered approach, showing empathy and sympathy for those affected, and building a shared understanding of the weaknesses and strengths of various institutions. Leaders' responses to the COVID-19 pandemic centered on ensuring delivery was consistent with the institutional principles. Leaders also endeavored to protect the physical and mental wellbeing of students and employees (Purcell & Lumbreras, 2021). Leaders were able to adapt their underlying tactics better to the real, perceived, and predicted threats posed and/or disclosed via the epidemic because of the clarity and strength of their institutions' objectives and visions. Leaders in institutions of HE often looked at their choices through an equity lens, which helped them understand the varied degrees of vulnerability among their constituencies and respond appropriately. In contrast, others responded with a cookie-cutter strategy that ignored the unique effects the crisis would have on each person (Purcell & Lumbreras, 2021).

Table 7

Findings

Themes	Findings
Negative Reaction to Changes in Higher Education	<ul style="list-style-type: none"> - Students reported negative emotional consequences such as anxiety, stress, and diminished motivation due to changes in instructional delivery and resource availability. - Disruptions to regular schedules and study spaces affected productivity. - Concerns about online learning, future prospects, grades, and personal well-being led to negative moods. - Challenges in mental health, relationships, and belonging exacerbated negative reactions.
Positive Reactions to Changes in Higher Education	<ul style="list-style-type: none"> - Some students found relief from anxiety, enjoyed flexibility, and had more time for personal pursuits due to changes. - Convenience, pace, and location independence were positive aspects of online learning for some students. - Increased free time allowed for personal wellness and recreational activities.

<p>Institutional and Policy-Level Factors Influencing International Students' Decisions</p>	<ul style="list-style-type: none"> - Residency challenges caused by bureaucratic red tape, visa regulations, and border closures impacted international students. - US government policies and restrictions, such as the ICE directives, affected international students' ability to remain enrolled. - Institutional structure, leadership, and relationships with instructors influenced international students' experiences and decisions.
<p>Institutional Leadership in Response to Crisis</p>	<ul style="list-style-type: none"> - Institutional leaders adapted to the COVID-19 crisis by promoting human-centered approaches, empathy, and shared understanding. - Some leaders focused on equity and individualized responses, while others used a cookie-cutter approach. - Leaders' responses were influenced by the institution's objectives, vision, and strategic investments.

Factors Influencing International Students' Decisions to Continue Pursuing Higher Education in the U.S. Post-COVID-19

Financials

Because HEIs are spending more on administration than they are on new faculty members, one can only hope this is a chance for HEIs to streamline their operations and put more money into their digital strategy and support their institutions' value-creating faculty. Possible turnaround options include joint partnerships and shared service agreements (Purcell & Lumbreras, 2021).

Financial challenges also affected international student experiences in the United States during the COVID-19 pandemic. Some nonacademic difficulties experienced by overseas students during times of crisis may be mitigated by institutional action (Martirosyan et al., 2022). It is suggested to set up an emergency fund to help overseas students in times of difficulty since they are not eligible for federal student aid or other subsidies accessible to their American classmates. Several universities and colleges have created international student emergency funds to help out overseas students in times of need. A few of the schools in question include the

University of Oklahoma, the University of Oklahoma at Buffalo, and the University of Texas at Dallas. Retaining students with emergency financial aid is more beneficial to the school than losing them (Martirosyan et al., 2022).

Having a steady income while in college is essential for many students. During the COVID-19 epidemic, their plight was exacerbated by the closure of institutions and the loss of numerous jobs by the students (Meier et al., 2022). Meier et al. (2022) examined how students' income and the kind of things they spend their money on changed during the course of the epidemic. As a result of the first lockdown, students saw a decrease in their employment earnings (Meier et al., 2022). The reopening had a speedy revival. The second lockdown also saw a drop in employment income, albeit it was not quite as severe as the first. Job loss exacerbated existing economic disparities, notably for women and students from nonacademic backgrounds. When student income dropped, they found ways to make up for it by taking out more loans and cutting less on extracurricular activities. Increases in student dropout intent were seen across all socioeconomic categories, but no significant differences were found (Meier et al., 2022).

Positive Environment

Overall, foreign students face more challenges when they are in an unwelcoming atmosphere. The United States has been discussing whether to eliminate the OPT program, which permits recent international graduates to find jobs or participate in internships in the country. In the case of STEM majors, OPT may extend work authorization by 24 months, whereas in the case of other majors, it can extend work authorization by up to a year (Bilecen, 2020). Ending OPT will help protect American workers from losing out on jobs. However, not every major receiving country has been so cold. It is essential that universities take an active role

in protecting the rights of foreign students, either by organizing such assistance or by negotiating with governments for the students' rights and well-being. The universities and government should enact adequate health and safety laws appertaining to student housing and campus life. Their loved ones probably worry most about their security and health care (Bilecen, 2020).

International students, particularly those from China and other parts of Asia, faced social exclusion, xenophobic attitudes, discrimination and verbal assaults, and the aforementioned uncertainties regarding their education, finances, and health care (Bilecen, 2020).

There has to be either a drop in tuition costs or an expansion of student-friendly work options. Even for young, healthy people, surviving in a strange place under lockdown conditions may be challenging. Overseas students are of diverse backgrounds. Information, hotlines, and support groups in English and the language of the nation of study are crucial for these students, regardless of their health situation. However, it is important to remember not all overseas students will have a solid grasp of the local language or English (Bilecen, 2020).

Institutions of higher learning have developed emergency response systems in preparation for future pandemics like the one caused by the COVID-19 virus (Sustarsic & Zhang, 2022). In times of crisis, foreign students need rapid and precise information on matters such as accommodation, visas, course structure and security (Godfrey & Yu, 2021b). An integrated effort across various service offices, departments, and student groups is necessary to efficiently satisfy the academic, financial, immigration, and mental health requirements of international students (Sustarsic & Zhang, 2022). This is especially important for foreign students from disadvantaged backgrounds, as they may lack resources for acquiring knowledge, money for living expenses, and social and cultural acceptance in their host country (Godfrey &

Yu, 2021b). Future support programs must prioritize both equality and excellence to guarantee the mental health and good academic performance of foreign students (Udah & Francis, 2022).

HEIs also need to develop more accessible methods of easing students' first adjustment to campus life and courses. When a national or global disaster strikes, it is very important for HEIs to engage their foreign students emotionally and psychologically (Tran, 2020). HEIs also need to provide opportunities for overseas students to share their perspectives and be heard. To retain foreign students, HEIs must develop methods to engage with them and recognize them as more than just students (Charoensap-Kelly & Punyanunt-Carter, 2022). It is crucial that we provide possibilities for scholarship and research after HEIs have assisted them in adapting to the program so they may develop professionally and contribute to the advancement of the subject. The current political atmosphere in our nation has made it more difficult to tolerate people of different backgrounds and beliefs. HEIs should respect their students' beliefs, even if they disagree with them. Colleges and universities must work to increase cultural diversity, equality, inclusion, and access. Programming and sessions at HEIs should be developed to further these discussions. Only by making everyone feel heard and valued can we increase enrollment among foreign students. For this reason, it is necessary to engage in meaningful conversations, the kind that encourage group decision making and provide opportunity for radical innovations (Charoensap-Kelly & Punyanunt-Carter, 2022).

A comprehensive approach to diversity in higher education necessitates the inclusion of underrepresented communities from both the United States and outside. HEIs can better attract and keep foreign students if they consider the unique challenges these students experience and work to improve their lives. Although the obstacles presented by COVID-19 were unique, they

did provide a chance for HEIs to reevaluate their strategies for assisting foreign students (Charoensap-Kelly & Punyanunt-Carter, 2022).

In the same vein, it is important to implement tactics to help students of various cultural backgrounds work together in the classroom (Godfrey & Yu, 2021b; Tran, 2020). One approach is to include nonwestern material in the curriculum, such as foreign case studies, resources, or points of view (Tran, 2020). Activities, simulations, and interactive dialogues in which students take on the role of a foreign student in their target language may be beneficial (Tran, 2020). When talking to her pupils on the concept of frame of reference, for instance, the first author sometimes slipped into her own language. This led to a discussion about the difficulties of communicating without a common reference point. In addition, she employs a simulation that divides the class into two fictional cultures with contrasting norms and practices and forces the students to work together to improve their intercultural competency. The simulation activities may help educators and students from all over the globe by enhancing their ability to communicate and promoting an appreciation for cultural diversity (Tran, 2020).

Online Learning

Wraparound programs that promote students' academic and personal success should be introduced to ensure the success of online learning programs. In addition, the digital learning environment benefits from the incorporation of strategies for extending activities that improve students' lives on campus. Partnerships on a local and international scale hold promise for realizing the SDGs. Using a problem-based approach and encouraging stakeholder participation in cocreation and collaborative work with open minds is one such technique (Purcell & Lumbreras, 2021).

Because of the COVID-19 epidemic, educators had to respond swiftly to a novel issue by shifting their focus from in-person to online education. Institutions offered online courses, and most of them trained their teachers to maintain the program's high standards even as enrollment grew. Training teachers has received more attention than students who have similar difficulties in adjusting to the new method of curriculum delivery (Neuwirth, Jovi, & Mukherji, 2021). There are not many strategies in place to help students make the forced transfer to online learning and sustain productive habits once they are there. Faculty members who are working actively to adapt to the epidemic may benefit from a frank discussion on the future of education (Neuwirth et al., 2021).

Several nations had to switch to an online style of higher education because of the COVID-19 epidemic, which forced them to abandon in-person training. In the United States, the prediction model demonstrates how students' perspectives on online education affect their concentration levels. Moreover, self-efficacy is a powerful regulator of mental effort. The effectiveness and/or maximal advantages of emergency online learning in cases like a worldwide pandemic depend on knowing how these elements impact their use (Aguilera-Hermida et al., 2021).

Chapter Summary

Overall, the findings presented in Chapter 4 provide a comprehensive understanding of the experiences and perceptions of international students during the COVID-19 pandemic. The study findings highlight the challenges students faced, the influence of institutional and policy-level factors on their decisions, and the factors that will shape their future decisions regarding higher education in the United States. I discuss the implications of these findings for policymakers, educational institutions, and the U.S. economy in the final chapter to inform and

guide policy and practice to enhance the retention and success of international students in U.S. higher education.

Chapter 5: Conclusions, Interpretations and Conclusions

The problem addressed through this project is the decline in the retention of foreign students in U.S. HEIs due to the COVID-19 pandemic. The pandemic significantly affected higher education, with foreign learners facing such critical issues as visa challenges and travel restrictions. The purpose of the study was to examine the factors that influenced the retention of foreign learners in U.S. HEIs during the COVID-19 pandemic period. The study aimed at identifying the unique challenges international students faced coping with the COVID-19 pandemic while in the United States. I further examined some of the key interventions HEIs should implement to ensure that international students' experiences remain positive and that existing challenges are resolved effectively. I sought to address the following research questions:

1. To what extent did the COVID-19 pandemic affect the social and academic experiences of international students in U.S. HEIs?
2. How did institutional and policy-level factors influence international students' decision to remain enrolled in U.S. HEIs during the pandemic?

Discussion of Findings

This section discusses the findings uncovered from the literature sources I analyzed. It provides understanding on factors fostering retention of international students in U.S. HEIs as well as challenges faced by international students who sought to remain and continue their studies during COVID-19 pandemic. The discussion of findings in this case thus revolves around international student engagement practices in U.S. HEIs. These practices encompass various forms of cultural capital, and thus, the focus of this discussion was on student engagement practices that can aid community college scholar-practitioners in practically reevaluating their policies, programs, and pedagogy. Consequently, this section explores four primary thematic

practices that have emerged as significant factors in various academic success strategies, including the social experience, academic experiences, as well as institutional and policy-level factors. A brief discussion on minor thematic practices also will be included at the end of this section.

The Extent to Which the COVID-19 Pandemic Affected the Social and Academic Experiences of International Students in U.S. Institutions of Higher Learning

The study noted a dramatic effect of COVID-19 on international students' social and academic experiences. Due to the containment measures such as closure of borders, social distancing, and self-quarantining, students were unable to engage in social activities with their peers. As Bilecen (2020) mentioned, international students could not engage physically with their families due to restricted travel and flight ban. The author further indicated international students felt isolated within their campuses and cities in the United States while worrying about their safety and that of their families. Familial support plays a significant role in an individual's success through educational endeavors or career objectives; however, when such support is limited in one way or the other, it creates a motivational gap that limits the self-efficiency in pursuing educational goals and carriers. Because international students were locked down and could not travel to their families, it created a motivational gap in pursuing their educational objectives considering most of their strength was focused on worrying about their families and safety rather than focusing on their education. Considering international students also benefit more from socializing with the local students, this aspect was limited owing the need of self-quarantining and social distancing. The need for self-quarantining and social distancing meant that physical movements were also restrained to a certain degree.

The United States is known for use of mixed instructional approach. This is through the use of both face-to-face instructional methods within campus as well as through online learning especially to those who prefer distance learning. This has helped in enhancing the enrollment rate of international students in higher learning institutions in the United States. In this case, students who preferred the physical on-campus learning were able to travel to the United States and pursue their educational goals. Notably, students who preferred distance learning method could attend classes through online platforms. However, with the onset of COVID-19, there were vast changes in instructional delivery that affected the learning pedagogy. As Purcell and Lumbreras (2021) noted, there was the development of Indiana University homepage and the Tulane University online platform, which helped in the online learning. Because of social distancing containment measure, students were not allowed to engage in a face-to-face instructional approach and therefore colleges and universities in the United States were obliged to innovate approaches through which to engage students in their learning.

It is from this perspective that the study realized technological enhancements and development of online learning platforms such as the use of webinars to engage students in their learning practices. Despite many students having online learning pedagogy as their preference, this approach was not sufficient to many tutors because they preferred the tried-and-true approach (Purcell & Lumbreras, 2021). Nevertheless, engagement in that instructional approach was difficult considering the need to comply with the containment measures. With this technological approach required for learning continuation, most international students were affected, especially those who were from low-income families and preferred the in-campus learning approach. The use of technology to engage students in learning created inequality and therefore students who could not use the technology were left out of the learning progress.

International students who were locked out during the pandemic and were engaged in on-campus learning were forced to enroll in distance learning. Notably it was unclear how such students could adopt such learning strategies as Sharaievska et al. (2022) indicated. Due to changes in instructional delivery as well as marginal adoptability by international students from low-income families, there was a negative response with regard to changes in higher education systems. The study noted increased anxiety and apprehensions when transitioning from traditional in-campus learning to online learning system; for instance, there was a reported increased level of sluggishness, procrastination, diminished productivity, motivation, attention, and inability to learn (Sharaievska et al., 2022). This means the use of technology had a disruption effect for international students. This could be explained through ineffective group working due to social distancing measures and limitations in physical movements.

The menace of isolation and uncertainty in the learning pedagogy led to mental health challenges among international students. This was coupled with the lack of social interactions with their families which created more worries. Besides, Browning et al. (2021) indicated international students experienced high rates of anxiety due to uncertainty and lack of socialization in learning which further affected their learning progress. Despite the technology disruption in higher learning systems within the United States, this study also noted the increased use of technology led to positive reactions in the changes within instructional delivery. In higher education, the technology has provided interactive and multimedia elements that capture students' attention and interest. The higher education has also benefited from the technology as it has enabled education to reach a broader audience (Mattson et al., 2021). The pandemic forced HEIs to adopt and rely on technology quickly for instruction, communication, and administrative tasks. The increased use of technology highlights the importance of digital transformation in

higher education. Institutions need to invest in robust technological infrastructure, provide training for faculty and staff, and develop effective online teaching and learning strategies (Barrot et al., 2021). The positive reactions to changes in higher education, driven by the increased use of technology, suggest hybrid learning models (combining in-person and online elements) could enhance the learning experience. Institutions can leverage the benefits of technology to offer flexible learning options, personalized instruction, and access to resources beyond traditional classroom settings.

The use of technology can contribute to improving accessibility and inclusivity in higher education. Virtual learning environments can accommodate students with physical disabilities, provide support for remote learners, and offer opportunities for international collaborations without the need for physical mobility. Institutions should prioritize accessibility in their digital tools and ensure equal access to educational resources for all students (Veersasamy & Ammigan, 2022). The positive reactions to changes indicate HEIs and stakeholders are capable of innovating and adapting to unforeseen challenges. This finding can encourage a culture of innovation and a willingness to embrace change, which is crucial for addressing future disruptions and improving the overall quality of education. The pandemic has exposed vulnerabilities in higher education systems worldwide. The increased use of technology and positive reactions highlight the need for institutions to be better prepared for future crises. This includes developing robust contingency plans, investing in digital infrastructure, promoting digital literacy among faculty and students, and fostering a culture of adaptability and resilience.

How Institutional and Policy-Level Factors Influence International Students' Decision to Remain Enrolled in U.S. HEIs During the Pandemic

The section is centered upon how institutional and policy-level factors influence international students' decision to remain enrolled in us HEIs during the pandemic. During the pandemic, several institutional and policy-level factors influenced international students' decisions to remain enrolled in U.S. HEIs. Therefore, this section explores practices that emerged across multiple forms of academic success strategies including the institution's response to the crisis, policy-level accommodations, visa and immigration policies, financial support, and overall student support services.

Despite the many challenges international students faced in U.S. HEIs, this study further noted policy measures to influence students' decisions to remain enrolled in these institutions. Essentially the policy measures were put in place to ensure international students are retained in these institutions and further remain positive in their learning progress. Notably the policies put in place were to ensure issues around the pandemic were resolved. For instance, tertiary institutions in the United States ensured streamlined more finances to digital learning systems to ensure that international students can still engage in classes and receive instructions through online platforms. This supported in value creation to international students despite being locked down and travel ban, which limited on-campus learning (Purcell & Lumbreras, 2021). Higher learning institutions also placed policies to enhance learning environment that comply with the COVID-19 containment measures. There was establishment of emergency response systems that helped in dealing with the pandemic as well as future disasters (Sustarsic & Zhang, 2022). In this case, policies were put in place to ensure international students could receive on-time information regarding their accommodation (especially those who were locked within the

campus or U.S. cities and could not travel home) as well as visa issues for students who were locked home. Additionally, policies were put in place to ensure students receive adequate information about course structures as well as their safety and security.

Policies were also put in place to ensure a comprehensive approach that ensures diversity within tertiary education systems. The approach was to necessitate inclusion of underrepresented communities from both the United States and internationally. Institutions of higher learning therefore could better attract and keep foreign students while also considering the unique challenges international students experience and work to improve their lives. Additionally, the study noted residency challenges negatively affected international students' decision to remain enrolled in U.S. HEIs during the pandemic. It was determined that institutional structure affected international students' decision to remain enrolled in U.S. HEIs during the pandemic. The findings show institutional leadership affected international students' decision to remain enrolled in U.S. HEIs during the pandemic.

Conclusions

Following the findings and further discussion of the study, it was realized that international students were vastly affected by the COVID-19 pandemic. The impacts were affected socially, academically, psychologically, and financially. This could be aligned to the limited socialization, movement and technological disruption in the education system which further led to anxiety, depression, and mental health challenges. Notably these impacts were largely attributed to COVID-19 containment measures such as social distancing, self-quarantining and closure of borders.

Due to increased technology use in instructional delivery, institutions of higher learning throughout the globe to reflect on the historical and contemporary reality of international student

exchange. Many universities are torn between wanting to help overseas students and being constrained by their own nations' travel, immigration, and public health rules. When it comes to both physical and digital mobility, foreign student enrolment has been influenced by disparities in strategy across top host nations. As a result of border controls, there is now a significant divide between the top hosting nations. Reentry restrictions for overseas students studying in the United States have been relaxed. As the border restrictions continue, it becomes more difficult for recruiting agencies to stay in business. A decrease in agents and a possible loss of expertise might come from prolonged border closures in important markets that send foreign students overseas. Once nations are ready to welcome students back, this domino effect might further postpone resuming.

In 2020, overseas students had substantial difficulties obtaining visas due to widespread disruptions in the visa processing systems. Wait times in the United States rose because visa processing facilities in other nations were unable to handle the volume of applicants. Although several nations have reopened or expanded visa processing facilities as of 2021, these choices may be reversed in other countries due to expected “waves” of COVID-19 cases. There is still a substantial backlog. However, many foreign students are reluctant to go forward with choosing and committing to a study location because of the uncertainties around visa application processing and the difficulty of the application materials itself.

Vaccine distribution is still quite different from one nation to the next. Because of this, colleges and universities must now consider how and when to implement their policies addressing the vaccine requirements for incoming students. However, it seems the introduction of the COVID vaccination has not deterred overseas students from attending universities in the United States. About half of the schools in the United States (45%) do not plan to mandate

vaccines for incoming students, instructors, or staff. Schools that intend to reinstate on-campus instruction are more likely to mandate vaccines, while many are still debating the issue (Martel & Baer, 2021). In the United States, colleges and universities decided to reopen their doors to students in the autumn of 2021 for in-person teaching thanks to a rapid vaccination rollout in the spring of 2021 and the availability of immunizations for college-age students.

It was concluded that the Covid-19 pandemic affected the financial status of U.S. universities due to a decline in enrolment. There has not been a speedy resurgence of students like many had hoped. This decline in student numbers has the potential to strain university budgets and the economy as a whole. Students from other countries who are still in the United States may be surprised by this decline in enrolment, but they may understand why it has occurred. Tuition for international students is often greater than that for native students at most universities, which has the potential to affect colleges' financial lines significantly. Lower enrolment might reduce university funding, raise domestic student prices, and harm the economy.

International students' tuition payments often go toward offsetting the expenses of higher education for local students. In fact, graduate-level enrolment in the United States is boosted by the presence of overseas students. Positive results are due to cross-subsidization, which occurs when money earned from tuition paid by international students is used to offset the expense of admitting more local students. U.S. colleges, the U.S. economy, and U.S. businesses are all suffering because of the growing trend of foreign students preferring to pursue their educations in nations other than the United States. Public research institutions will be hit particularly hard by the downward enrolment trend if they cannot retain full-fee-paying, high-ability overseas

students. Public colleges risk having their quality eroded if they are forced to increase in-state tuition to compensate for a drop in international enrollment.

The study concluded the COVID-19 pandemic affected international academic collaborations between universities. A variety of new learning methods, especially in online education, have been developed because of the COVID-19 pandemic's global impact on the higher education sector. In addition to enabling online education and virtual interactions, universities will need to tackle the problem of preparing students for the future of learning. As the pandemic has spread, universities were pushed to develop long-term strategies to improve their students' education via means such as virtual internationalization and by encouraging them to be active participants in their own education.

Collaborating schools might combine their resources to establish a cross-campus online course network as a result of the proliferation of e-learning and the improvement in the accessibility of information thanks to technological advancements. Students not only have access to a wider range of academic expertise and viewpoints because of the diversity of the member institutions, but they also have more opportunities to engage in cross-institutional research and learning partnerships. The curricula are designed to pool the strengths of many top schools so that participants may benefit from a wide range of foreign viewpoints and engage in meaningful cross-cultural exchange.

Therefore, it is conceivable to create a global classroom in which students from various nations may take advantage of digital chances for foreign immersion that go beyond the bounds of conventional pedagogy. Teachers may create a global classroom free from geographical constraints, where students from all over the world can work together on projects and problems and where they can be exposed to new ideas and methods to improve their critical thinking. To

effectively deliver online education as the higher education industry undergoes a transformation and embraces a digitally linked future, relationship development is essential. The adoption of online international partnerships is a need in today's digital age because of the positive effects they have on the dynamic ecology of knowledge, the availability of higher education, and diversity. By paving the way for more virtualization on campus and beyond, innovative online learning has the potential to ensure the long-term viability of higher education.

It was concluded that the COVID-19 pandemic led to changes in instruction delivery mode. In the United States, several schools and universities went completely online or partially online to start the Fall 2020 semester. U.S. schools gradually increased the number of on-campus alternatives available to overseas students in preparation for the Spring 2021 semester (Martel & Baer, 2021). Student satisfaction with their education is increased even when just a modest quantity of face-to-face instruction is provided. Those students who were either unable to travel at the time or were waiting on a visa benefited greatly from online education. In the fall of 2020, twenty percent of all foreign students enrolled in a U.S. university did so while living outside the country (Baer & Martel, 2020). Student's mental health, well-being, and financial stability were all affected by the method of teaching they received during the 2020–2021 school year.

The global spread of the COVID-19 virus has caused havoc in classrooms. Many nations took notice and instituted distance education programs. Implementing remote learning modalities as an emergency reaction was a primary emphasis of the education response in the first stages of the COVID-19 outbreak. These were meant to be inclusive of all pupils, but their effectiveness was not guaranteed. Education responses have changed as the epidemic has progressed. Many regions' educational institutions are now either mostly or completely operational. The availability of technology is essential, but not sufficient, for successful distance education. Technology in

education has been essential to keeping education going throughout the lockdown, and it has created exciting new possibilities for reaching more students. However, the problem of technology's influence on schooling persists.

It was concluded that the COVID-19 pandemic resulted in changes in schedule and everyday life. After a prolonged amount of time during the lockdown, students gradually resumed their online coursework. The dynamic of the classroom underwent a dramatic shift. The infection is not a gift to students but rather a warning that they will need to make changes to their approach to online learning in the future. Students might put that time to better use studying or pursuing other interests. Instead of going out and about, they stayed inside to study. With so much spare time at COVID-19, it was the perfect opportunity to catch up with distant relatives. Also, everyone was doing their job from their own houses. You did not have to leave the home to catch up with your family. One may just pick up the phone and contact them to have a conversation. Family ties were strengthened as a result. Students and parents might sit down together to talk about career goals and explore possible next steps in the process.

Many low-income kids do not have access to personal computers. Therefore, they are uninformed. Many feel there is too much of a gap in educational opportunities. There are no tests, so students must depend on their own efforts to get a passing grade, and this is only one of several potential drawbacks. Their future in the workforce may be affected. The pupils' futures may be seen via these elements.

It was concluded that the COVID-19 pandemic led to negative reactions to changes in higher education. Teachers who took part in our research indicated many pupils had trouble getting online lessons. Some students who were studying abroad had returned to their home countries to continue their studies while others worked from home. Unfortunately, not all

students had ready access to the technology necessary for real-time video conferencing. Physical and/or learning difficulties, as well as illness or stress brought on by the pandemic, exacerbated students' preexisting susceptibility during the outbreak. Access to technology, students' preexisting information communication abilities, and students' competence in the official language were other determinants. Caregiving responsibilities, socioeconomic position, immigrant status, time zone, race, ethnicity, gender, and religious affiliation were all considered. The COVID-19 pandemic heightened the need to provide students with individualized accommodations and assistance to help them succeed academically at times of frequent internet changes.

The COVID-19 pandemic led to positive reactions to changes in higher education. It was said that taking lessons online saves time and effort. With the advent of online education, students may now participate in courses without leaving the comfort of their own homes. Even on the way home from school, students might spend their time productively by enrolling in an online course. The only need was access to the internet and a computer or mobile device for the pupils.

Some people may think interacting with others in a physical classroom is the most normal and effective method to learn. However, it is not always the case. There is no such thing as a “back row” in an online classroom. Everyone is seated close to the front. Those who are too nervous about speaking out in front of the whole class may now initiate a one-on-one conversation with the teacher in real time. If a student does not feel comfortable speaking in front of the whole class, they can mute their microphone or turn off their camera and still take part in the activity. It can seem that an online student's capacity to remain anonymous is a drawback of the format. However, nowadays, educators may use online quizzes to gauge

students' interest. They have the ability to enhance and modify videos for use in online education. A teacher may make notes on a chalkboard in a traditional classroom, with the expectation that the pupils would copy them down. Teachers using online platforms may take notes on a digital whiteboard or have their students take notes in real-time, which their students can then download and review at their convenience.

The COVID-19 pandemic led to negative reactions to changes in higher education. Isolation is a potential risk of studying online. The way an individual learns is unique to them. Some students can study alone while others thrive in a campus environment where they may connect easily with faculty and peers. Educators have used online virtual classroom platforms to close the gaps between students and teachers, establishing a sense of community in the digital realm via the development of a set of technologies designed to boost student participation in real-time classes. To be as successful as conventional classrooms, online education must promote the social side of learning.

Technical difficulties are common in online education. Traditional drawbacks of online education revolve around hiccups in technology. Problems with the audio, video, or internet connection may completely derail a virtual classroom experience. In the past, students often had to deal with clunky software or technology installations that were unreliable in their functionality. Thankfully, there is no longer any need for pre-installation to have access to online courses. The quality of internet access in every region of the globe has increased significantly. In addition, individuals often have greater technology at their disposal.

Screen time increases while taking classes online. It was bound to happen eventually, but students had to spend much time on their devices. The rise of online education is a contributing factor. Poor posture and headaches are only two of the physical problems that may result from

staring at a computer for too long. However, it may also be an individual problem for children who have trouble concentrating or studying when using electronic devices. Considering how social media and other forms of online entertainment are strategically placed to lure students away from their studies, it was difficult for students to concentrate on learning activities. To keep their attention and interest, students using the best available online learning platforms and software have access to a wide variety of features and tools.

The study concluded the COVID-19 pandemic led to increased use of technology in higher education. Most college students were redirected immediately to online classes in the spring of 2020 due to the COVID-19 epidemic. Rather than relying only on video lectures to keep students engaged, many teachers are turning to interactive technologies and hybrid models that combine online and in-person activities. These resources influenced pedagogy and evaluation in ways that may last long after the epidemic has passed. The epidemic increased the need to develop a novel online education platform. Because of this, synchronous and hybrid learning is now front-and-center as institutions plan for the future of education. As a result, many U.S. HEIs have made substantial investments to expand their online and hybrid course offerings.

How Institutional and Policy-Level Factors Influenced International Students' Decision to Remain Enrolled in U.S. HEIs During the Pandemic

Residency challenges negatively affected international students' decision to remain enrolled in U.S. HEIs during the pandemic. COVID-19 and the July 6, 2020, Policy Directive caused issues for students trying to enter the United States on a student visa. Many overseas students have been left in limbo since the release of the 2020 Policy Directive on July 6. To get through this time, various things or services were required. This includes the university's and the international student office's commitment to the mental and emotional well-being of foreign

students via counseling services and other resources. The institution provided a food aid program for the overseas students. However, students were ineligible for any other forms of help than those offered by the institution itself and by state and federal governments. Whether or if keeping their F-1 visa status was a top priority.

It was concluded that institutional structure affected international students' decision to remain enrolled in U.S. HEIs during the pandemic. Features of the educational system related to university structure include but are not limited to, graduation and research delays, program flexibility or rigidity, interaction with professors, and output requirements. Centralization of power, lack of action, and clear orders and guidelines all fall within the purview of structural governance. Due to a change in the educational paradigm, labs had to close at the start of the epidemic, research participant recruitment was put on hold, and graduation deadlines were moved.

The study concluded institutional leadership affected international students' decision to remain enrolled in U.S. HEIs during the pandemic. Leadership in higher education has a significant impact on students' choices to stay in school. Improved retention rates could arise from a better grasp of the issues that affect students' contentment and discontent. Recruiters and school officials alike hold the issue of student retention in the highest regard. There is a compelling economic argument to be made for raising student retention and graduation rates. The effectiveness of institutional leadership in managing retention is viewed as a key measure of both quality and dedication to student achievement.

Implications for Practice

The findings of this study have several implications for HEI leaders in the United States, particularly in addressing the decline in the retention of international students post-COVID-19.

One key implication is the need for institutions to prioritize and enhance the support services provided to international students, considering the unique challenges they face during the pandemic and beyond (Charoensap-Kelly & Punyanunt-Carter, 2022). The study's findings highlight the significant impact of the COVID-19 pandemic on the social and academic experiences of international students in U.S. HEIs. HEI leaders should recognize the importance of addressing these challenges to create a welcoming and supportive environment for international students (Bilecen, 2020). This can be achieved by implementing policies and programs that target the needs of international students during crises such as pandemics.

One of the study's findings emphasizes the influence of institutional and policy-level factors on international students' decision to remain enrolled in U.S. HEIs during the pandemic. Leaders should closely examine their institution's policies and practices to ensure they are aligned with the needs and expectations of international students (Charoensap-Kelly & Punyanunt-Carter, 2022). This includes reviewing visa processing procedures and policies to facilitate smoother entry and stay for international students.

Furthermore, the study's findings suggest international students' perceptions about HEIs post-COVID-19 are influenced by factors such as access to health care and overall well-being. Leaders should consider the holistic well-being of international students, including their physical and mental health, as an integral part of their support services. This may involve improving access to health care services, mental health counselling, and creating a campus environment that promotes well-being and inclusivity.

The financial implications cannot be overlooked either. The decline in international student enrolment has resulted in a significant loss of revenue for HEIs. To mitigate this, leaders should engage actively in efforts to attract more international students by implementing policies

and practices that make the United States a more attractive destination. This could include improving the affordability and accessibility of education, providing scholarships or financial aid specifically for international students, and promoting the value of international education and cultural diversity (Mbous et al., 2022). Institutions that proactively addressed these factors were more successful in retaining their international student population during these challenging times.

Recommendations

- **Enhancing Family Engagement for International Students:** U.S. education institutions, particularly tertiary institutions, should prioritize enhancing policies that promote social and academic benefits for international students. Family engagement should be facilitated through online activities. Institutional management should develop platforms that allow international students to interact freely with their families without incurring charges, which will help alleviate feelings of isolation and support students' overall well-being.
- **Language Accessibility in Online Learning:** Recognizing English is not the second language for all international students, educational institutions should address language barriers in online learning. To ensure effective engagement, instructors should provide instructional materials in various languages, making concepts accessible during crises that require independent learning. This approach can help bridge the language gap and improve comprehension.
- **Financial Sustainability of Different University Types:** The varying financial futures of U.S. universities necessitate tailored strategies. Although top universities remain financially secure due to their endowments, smaller institutions face challenges such

as enrollment decline and financial strain. To overcome these challenges, universities should focus on measures like diversifying revenue streams, controlling operational costs, and adapting to evolving educational demands.

- **Holistic Approaches to Financial Recovery:** Institutions facing financial distress should adopt holistic approaches to recovery. Cutbacks and austerity measures alone are insufficient. Prioritizing student success and exploring new income streams are essential. Effective solutions should address career services, student retention, and financial aid to ensure the institution's long-term viability.
- **Creating a Positive Learning Environment Post-COVID-19:** HEIs must create positive learning environments to thrive post-COVID-19. Hybrid teaching models and alternative study options have gained prominence. Universities should invest in communication, mental health support, financial aid, and activities that enhance the overall experience for international students, fostering a welcoming atmosphere.
- **Addressing Global Stress and Anxiety:** Acknowledging the increased stress and anxiety among international students due to the COVID-19 pandemic, institutions should expand health-related outreach and support services. Governments, nonprofits, and organizations should continue providing financial aid to alleviate students' financial burdens. Encouraging students to seek help and ensuring equal access to essential resources is crucial.
- **Enhancing Online Learning for Equitable Access:** In the post-COVID-19 era, institutions should strengthen online learning offerings. Combining online and classroom-based learning can enhance educational accessibility. Equal access to the

internet should be ensured for all students, and efforts should be made to combat digital racism and ensure culturally sensitive education.

- **Promoting Digital Accessibility:** Universities should prioritize digital accessibility by implementing technologies supported by IT departments. Tools such as text-to-speech, high-contrast themes, closed captioning, and accessible course materials should be integrated to cater to diverse students' needs and time zones.
- **Culturally Sensitive Education and Inclusivity:** Institutions should emphasize culturally sensitive education. Teachers should prioritize fairness and avoid generic approaches. Acknowledging students' varied life experiences and actively integrating them into the curriculum is essential. Students of all backgrounds should feel included, respected, and valued.

Future Research

This study contributes invaluable insights into the experiential landscape of international students in U.S. HEIs amid the COVID-19 pandemic. However, there exist multiple domains necessitating further inquiry to augment our comprehension and inform future praxis.

Primarily, future research endeavors could concentrate on delving into the enduring repercussions of the pandemic on the retention and achievement of international students. This entails examining the long-run experiences of international students beyond the immediate pandemic-induced impact, scrutinizing the evolutionary trajectory of their perceptions and decisions over time, and discerning strategies that facilitate their sustained integration and academic attainment.

Secondarily, conducting comparative studies across disparate nations would prove advantageous in comprehending the manifold dimensions shaping international students'

experiences and perceptions within diverse higher education systems. This would yield insights into the distinctive factors that augment the allure of specific countries as preferred destinations for international students, subsequently guiding policy formulation and praxis in the United States to bolster its competitiveness in the global higher education milieu.

Moreover, future research could engage in deeper exploration of the intersectionality inherent in international students' experiences, incorporating elements such as nationality, race, gender, and socioeconomic background. Unraveling the intricate interplay between these intersecting identities and their influence on international students' perceptions and experiences would empower institutions to tailor their support services effectively, thus better aligning them with the multifarious needs of the international student populace.

Furthermore, investigating the impact of discrete interventions and support programs on international students' retention and success would confer significant value. This entails evaluating the efficacy of initiatives, such as mentorship programs, cultural assimilation activities, academic support services, and mental health resources, in fostering the well-being and academic accomplishments of international students.

Conclusion

The study elucidates the determinants underpinning the retention of international students in U.S. HEIs amid the COVID-19 pandemic. The findings underscore the paramount significance of addressing the challenges encountered by international students and implementing supportive policies and practices that foster an inclusive and hospitable milieu.

Implications for higher education leaders encompass prioritizing the provision of comprehensive support services for international students, reevaluating institutional policies and practices, and fostering the holistic well-being of this diverse demographic. Furthermore,

concerted efforts should be made to attract and retain international students through targeted strategies, financial aid provisions, and initiatives that heighten the overall quality of the student experience.

Although this study yields invaluable insights, further research is imperative to deepen our understanding of the experiences and requisites of international students. Subsequent investigations could traverse the terrain of long-term pandemic effects, comparative analyses, intersectionality inquiries, and the evaluative examination of specific interventions. By addressing challenges and implementing evidence-based recommendations, higher education leaders can guarantee the retention and triumph of international students in the realm of U.S. higher education. This, in turn, will contribute to the enrichment of academic and cultural diversity, the financial sustainability of institutions, and the long-term socioeconomic benefits for the United States as a whole.

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Appendices

Appendix A: Data Extraction Form

Serial No.	Title	Database	Eligibility criteria	Electronic link	Methodology

Findings	Conclusions	Recommendations	Knowledge gaps	Critique

Appendix B: PRISMA 2009 Flow Diagram

