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Why Did You Come to Study In the United States? Analysis of the Phenomenon of Modern Chinese Students Studying In the United States

Beitong Liu bl2906@bard.edu

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Recommended Citation

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Why Did You Come to Study In the United States? Analysis of the Phenomenon of Modern Chinese Students Studying In the United States

Senior Project Submitted to

The Division of Social Studies of Bard College

by

Beitong Liu

Annandale-on-Hudson, New York

December 2022

Dedication

Dedicated to Me

As a member of the Chinese students in the United States

I hope I will always have a passion for life

integrity, courage, and optimism.

Dedicated to Min

As an inspiration for my sproj and my love

I hope you will always be surrounded by happiness

Whisper it to you

You are in my future plans

To my parents, my eternal supporters

To the world

To every one who suffers in the Covid-19

And to every kindness

Acknowledgements

I came to the U.S. by chance to study in college. During my years in the United States, I have frequently pondered why an increasing number of Chinese students choose to pursue their education in the United States. Most of the Chinese students that I met in the United States appeared much more intentional about the process that led them to study abroad. I have often pondered the benefits of a college education in the United States and how I may apply what I have learned. So in talking with Peter Rosenblum, he also found out that I was interested in this phenomenon. Thus, the Senior Project came to be.

First and foremost, I extend my deepest gratitude to my two advisors, professors Robert J. Culp and Peter Rosenblum. I am grateful to Prof. Culp for all the encouragement he provided not just for the Senior Project but also my studies during the last four years. I am also grateful to Professor Rosenblum for being willing to be my advisor for the second half of my Senior Project, for all the support and assistance with my Senior Project, for your love of Chinese music, and for your sense of humor, which made it easier for me to think and write during the highly stressful final phase.

Second, I would like to thank every one of my friends for their help with my questionnaire at the last minute and everyone who participated in my survey. All the data supports my further exploration of this topic.

Upon completion of this senior project, I will have fulfilled all requirements for the global and international studies major. But it will also serve as a new starting point for exploring the world. I shall explore the future with all the enthusiasm and bravery I can summon, filled with gratitude. I will spread my love of Chinese music to America and the world.

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Introduction

The young generation is the country's future, and the growth of the young generation is tightly tied to education. Against the backdrop of economic globalization, the impact of education globalization on individuals is intensifying. The concept of "study abroad" is no longer unfamiliar or arcane for Chinese people, and a rising number of individuals are pursuing their education abroad. Because the United States is one of the most developed countries, an increasing number of Chinese students have decided to study abroad there.

Anecdotally, it appears that Chinese students in American classes were unusual to American people in the late 19th or early 20th century since there were so few of them on university campuses. However, Chinese students are now so common on American campuses that it scarcely surprises anyone to see them. From the late 19th century, when the Chinese government sent the first students to the United States, to the current Chinese students in 2019, 1,075,496 Chinese students studied in the United States¹. There have been four periods, the late Qing Dynasty, the Beiyang government, the Nanjing government, and the reform and opening up of the People's Republic of China. Since the establishment of the People's Republic of China in 1949 and the reform and opening up policy, the efforts of both the Chinese and American governments have increased the number of students studying in the United States, creating a trend of people called "study abroad fever". The number of Chinese students coming to the U.S. has increased, and education in the U.S. is becoming more diversified and widespread. Also, a growing number of Chinese students choose to stay in the U.S. after completing their studies. This phenomenon has led to a brain drain in China. Thus, the Chinese government is actively

¹ "Open-Doors-2020-Fast-Facts.Pdf." Accessed December 1, 2022. https://opendoorsdata.org/wp-content/uploads/2020/05/Open-Doors-2020-Fast-Facts.pdf.

taking steps to respond to the brain drain and has introduced policies to attract talented students to return to China. Finally, after the global outbreak of Covid, the number of Chinese students studying in the U.S., which had continued to rise, suddenly trended downward.

This senior project initially establishes the People's Republic of China as the dividing line between the four periods of Chinese students studying in the United States in modern times. First, it describes the circumstances of Chinese students studying in the United States during the late Qing Dynasty, the Beiyang Government, and the Nanjing Government, as well as their geographical dispersion, similarities in the subject selection, and contrasts in student status. The first chapter also examines the situation of Chinese students in the United States during the early years of the People's Republic of China's reform and opening up.

The second chapter examines the situation of Chinese students studying in the United States at present-day. This chapter will utilize the push-pull theory to investigate the causes of the increase in the number of Chinese students studying in the United States before the global breakout of Covid-19. This chapter will focus on the push factors on the Chinese side, which include the pressure of the *gaokao*, the education difficulties caused by the *hukou*, and the comprehensive service of Chinese study abroad agencies, as well as the pull factors, which include the excellent educational resources in the United States, the recognition of American education in China, and the English language environment in the United States. Chapter two also concludes with a discussion of the phenomena and causes underlying the drop in the number of Chinese students studying in the United States following the global outbreak of Covid-19.

The third chapter focuses on the actions made by the Chinese government to prevent the brain drain in China after a substantial number of Chinese students remained in the United States after completing their education. It also examines the current Chinese government's measures to

encourage Chinese students back to China to work, such as scholarship and *hukou* policies for students returning to China to work.

Chapter 1

Four Periods of Modern Chinese Student Study in the United States:

The development of Chinese students studying in the U.S. had its trials since the late Qing Dynasty when the first three students went to the U.S. in 1847². In this 175-year journey, it has experienced the first group of young children to study in the U.S., the Boxer Indemnity students in the U.S., the period of suspension of study U.S. during the breakup of Sino-American relations, and the encouragement of study in the U.S. by Deng Xiaoping in 1978. This chapter will provide a more explicit framework for the history and development of modern Chinese students studying in the United States. It begins with the period of the Westernization Movement in the late Qing Dynasty.

Late Qing Dynasty Period:

The beginning of modern Chinese history of studying in the U.S. dates back to the late Qing Dynasty during the Westernization Movement when the westernized party led by Zeng Guofan and Li Hongzhang advocated learning Western culture and proposed "learn from the advanced technologies in the West to resist the invasion of the Western powers3". Also, because of Yung Wing, who was the first Chinese student to receive a formal higher education degree from the United States, made unremitting efforts to explain the importance of studying abroad to Zeng Guofan and Li Hongzhang, the first group of Chinese children successfully went to the U.S. in 1872.

² Liu Jilin 刘集林 and Li Xisuo李喜所, eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Wan Qing Juan, 中国留学通史晚清卷 [General History of Chinese Study Abroad in the Late Qing Dynasty] (Guangzhou Shi: Guangdong jiao yu chu ban she, 2010), 19.

³ The original Chinese is 师夷长技以制夷

According to the book *General History of Chinese Study Abroad in the Late Qing Dynasty*⁴, written by Liu Jilin, and edited by Li Xishuo, "In 1847, Yung Wing, Huang Sheng, and Huang Kuan went to the United States from the Morrison Memorial Schoo in Hong Kong with the help of American missionary Samuel Robbins Brown. In the summer of 1854, Yung Wing received his Bachelor of Arts degree from Yale University ⁵". His study abroad experiences made him realize that the progressive ideas he learned in the West could change the current situation of China and make China develop better. In 1873-1875, three more groups of 90 children arrived in the U.S., and a total of 120 12-13 years old children came to the U.S. Liu wrote,

"These children who returned to the United States did their best to devote themselves to the cause of China's modernization despite being oppressed and attacked by the conservative obstinacy in China. In the 1911 Revolution period, the children who stayed in the United States gradually stood out with their outstanding performance, and their social status rose rapidly. Some became prominent political, military, business, and academic figures committed to promoting the modernization of Chinese social thought, system, and concepts. Some served as technical backbones and managers in industrial fields such as industry and mining, railway, post, and telecommunications and actively promoted the industrialization of modern China. Famous railway engineer Zhan Tianyou, mining and metallurgical engineer Wu Yangzeng of Kailuan Coal Mine, President of Beiyang University Cai Shaoji, President of Tsinghua University Tang Guoan, Secretary General of Transportation Liang Dunyan in the late Qing Dynasty and Prime Minister of the early Republic of China Tang Shaoyi were among the outstanding representatives".

Children from China who studied in the United States demonstrated through their acts that studying abroad is an efficient means of cultivating new talent. Liu quoted a career

⁴ General History of Chinese Study Abroad in the Late Qing Dynasty 中国留学通史 This book is written by Liu Jilin, and edited by Li Xisuo, this book is divided into three volumes, the late Qing Dynasty volume, the Republic of China volume, and the People's republic of China volume. Each book has a different author, but all are edited by Li Xisuo.

⁵ Liu and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Wan Qing Juan, 中国 留学通史晚清卷 [General History of Chinese Study Abroad in the Late Qing Dynasty], 120. 19.

⁶ Liu and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Wan Qing Juan, 中国 留学通史晚清卷 [General History of Chinese Study Abroad in the Late Qing Dynasty], 120. 119-120

distribution table of Chinese students who returned to China from the United States (see *Table 1*) from Thomas E. LaFargue's book *History of Chinese Young Children in the United States*.

Table 1. Career Distribution of Chinese Students Study in The U.S.⁷

Job Position	Number of People	Job Position	Number of People
The Prime Minister	1	Director of Railways	3
Foreign Affairs Minister	2	Railway official	5
Minister	2	Railway engineer	6
Foreign Affairs officer	12	Metallurgical technician	9
Admiral	2	Official of the telegraph office	16
Navy officer	14	Merchant	8
Military medical	4	Statesman	3
Revenue Division	1	Doctor	3
Customs officer	2	Lawyer	1
Teacher	3	Work in the press	2
Died of illness in the United States	3	Unknown	4

During the late Qing Dynasty, China was particularly tumultuous. The internal system of the Qing dynasty was in disarray, and Western aggression against China damaged China's territory and sovereignty. Because educated thought and technology may alleviate the national crisis, the late Qing Dynasty urgently needed modern western learning talent. Consequently, intellectuals with study abroad experience during the 1911 Revolution played an important role in liberating the minds of the Chinese people and reforming China's political structure at that

⁷ Liu and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Wan Qing Juan, 中国 留学通史晚清卷 [General History of Chinese Study Abroad in the Late Qing Dynasty], 120.

time. After they returned to China, these students influenced the late Qing Dynasty's military, economic, diplomatic, political, intellectual, and legal development. Let China progressively emerge from its traditional feudal structure and initiate social development.

Beiyang Government Period:

The second period for Chinese students to study in the United States was the Beiyang government period. Although the number of Chinese students studying in the United States was not large then, people were more inclined to study in Japan, which was closer. "Boxer Indemnity Study Plan8" encouraged more Chinese students to study in the United States at that time. "Boxer Indemnity Study Plan" is an educational plan jointly implemented by the Chinese and American governments. In 1908, the American government decided to return part of the Boxer Indemnity to support the Chinese government in sending more students to the United States. In 1911, the late Qing government set up a preparatory school for students in the United States, Tsinghua School. According to the article "Boxer Indemnity Study Plan and Chinese Study Abroad Students" written by Liang Biying. She wrote,

"On September 7, 1901, the Qing government signed the Treaty of Sin Chou with eleven imperialist countries, including Russia, Britain, and the United States. The treaty stipulated China would pay an indemnity of 450 million taels of silver, to be repaid in 39 years with a maturity of four percent, principal, and interest totaling 980 million taels. It became known as the Boxer Indemnity. The United States received 32,939,055 taels (\$24,440,778.82), which is 7.3 percent of the total. Plus annual interest, the total was \$53,351,511.15 by 1940. In 1909, the United States officially began to return part of the Boxer indemnity to China and used it for education in China and to help Chinese students study in the U.S."

⁸ The Chinese term "Indemnity Study Plan" is 庚款兴学

⁹ Biying Liang, "Boxer Indemnity Study Plan and Chinese Study Abroad Students," Guizhou Journal of Social Sciences 12 (1991): 45.

The part of Boxer Indemnity returned by the United States not only promoted the development of China's education but also promoted the relationship between China and the United States.

Among these students, a large number of intellectuals were also cultivated.

During the Beiyang government period, many self-funded students also studied in the United States. First of all, in the early stages of the Republic of China, the new government reformed the old legal system by the Western judicial requirements and increased the tax revenue to improve the tax system. These reforms make people who have studied scientific knowledge and understand advanced thoughts in other countries highly valued. Meanwhile, during the May 4th Movement in 1919, intellectuals brought many Western thoughts into China. Intellectuals attacked some traditional Chinese thoughts; they called them "old thoughts" and encouraged the use of Western ideas to save China. According to the book General History of Chinese Study Abroad in the Republic of China written by Yuan Qing, "Many scholars (the backbone of which were mostly students studying in the United States) vigorously advocated and spread Western culture and attacked China's feudal "cannibalistic10" rituals and cultural consciousness, and Wu Zhihui, Zhou Zuoren, Qian Xuantong, Hu Shi and others even put forward the idea of total Westernization. This created a strong social trend of learning from the West, making people more inclined to Western culture and willing to study abroad 11". So more people were willing to self-finance and study abroad, hoping to learn about advanced Western thoughts, knowledge, and culture to reform and develop Chinese society. According to Yue's doctoral dissertation "The

¹⁰ The term "cannibalism" comes from Lu Xun's first short vernacular diary novel, Diary of a Madman. The "cannibalism" metaphor is the Chinese feudal ritual. The novel reveals the "cannibalistic" nature of feudal rituals through the image of the victim, the "madman", and the self-referential descriptions of the "madman".

¹¹ Yuan Qing 元青 and Li Xisuo李喜所, eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China] (Guangzhou Shi: Guangdong jiao yu chu ban she, 2010), 36.

Research of China Overseas Education in America since the Reform and Opening-Up", she quoted from the article "A Survey of Chinese Students Studying in the United States" published in Educational Journals shows, "In 1925, there were 627 government-funded students and Boxer Indemnity supported students studying in the United States, and 1,075 self-funded students. The number of self-funded students in the United States accounted for 61.5 percent of the total. It can be seen that self-financed students study in the United States have become the main body in the early years of the Republic of China¹²".

Nanjing Government Period:

While the trend of U.S. study abroad grew steadily during the Beiyang government, it fluctuated during the Nanjing government for three reasons. First, is the economic crisis in the U.S. Yuan wrote, "The economic crisis of 1929-1932 swept through the capitalist world, and production fell by an average of 34%, with the United States being no exception, down 45.2%. The economic downturn led to the closing of schools and made it difficult for young Americans to attend school, and even more difficult for foreign students¹³". Second, because the early years of the Nanjing government were a time of frequent wars, the eight years of the Sino-Japanese War and the Civil War caused the government to spend a lot of money on military affairs, and the lack of funding for education also affected the development of Chinese students studying in the

¹² Liu Mei Xue Sheng Zhi Diao Cha留美学生之调查, [A Survey of Chinese Students Studying in the United States], Journal of Education, Vol. 17, No. 3, Education News, quoted in Tingting Yue 岳婷婷, 改革开放以来的留美教育研究 "The Research of China Overseas Education in America since the Reform and Opening-Up" (Doctoral dissertation, Nankai University, 2015), 21.

¹³ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 200.

United States¹⁴. Third, the Nanjing Government raised the requirements for studying abroad. Yuan wrote,

"After the Nanjing Government's establishment, it issued the Regulations for Issuing Certificates of Study Abroad and the Outline of the Provisional Measures for Selecting and Sending Students to Study Abroad in 1929, which stipulated that students must have graduated from high school or above. These two policies played a certain role in the early stage of the Nanjing Government, rectifying the study abroad system and improving the eligibility for study abroad. It was stipulated that both government-funded and self-funded students had to receive certificates of study abroad, which changed the lenient eligibility policy for studying abroad during the Beiyang period¹⁵".

This has led to many students no longer being able to study abroad as long as they have the money as before. Restrictions on study abroad requirements have led to study abroad not being a completely self-directed act but rather limited by the terms and conditions. But after the U.S. emerged from the financial crisis, China's situation has relatively stabilized. Studying abroad in the U.S. is gradually recovering. Yuan wrote, "In 1933, the Ministry of Education of the Nanjing Government promulgated 46 regulations for studying abroad, with detailed provisions on the eligibility, examination and selection, management, and service obligations of government-funded and self-funded students by each province and municipalities education for studying abroad abroad 1657.

Due to the government's dispatch, the number of Chinese students studying in the United States gradually rose again. The study of the U.S. students under the Nanjing Government was divided into Boxer Indemnity-supported students selected by Tsinghua University. The students

¹⁴ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 201.

¹⁵ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 201.

¹⁶ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 201.

were chosen by the provinces, the students chosen by the Kuomintang, and the self-funded students. A new type of study abroad also emerged at this time, namely "military student abroad students", who were selected by the government to study military knowledge in the United States, Japan, and Europe¹⁷. These military students also contributed a lot to the modernization of China's military.

There are some similarities and differences between the three different periods of Chinese students who came to the United States in these three periods. The first common point is that most of these Chinese students came from cities on the eastern seaboard, mainly Shanghai, Jiangsu, Guangdong, Zhejiang, and Fujian, where the economy was developing well¹⁸. Second, there are similarities in the majors chosen by these three periods of Chinese students. Generally, the students who studied in the U.S. with government-funded chose practical disciplines, focusing on engineering, agriculture, medicine, mathematics, agriculture and architecture, and other professions with solid technical expertise because all three periods of Chinese students came to the United States at a time when the Chinese economy was at a low stage in its development, and accompanied by ongoing war and revolutionaries. Government-founded students choose their majors based on the country's specific needs. The advanced technology of the United States also influenced the student's choice of majors. And most of the self-funded Chinese students in these three periods choose their majors based on their interests and preferences. Many professional fields are involved, such as law, economics, sociology, political

¹⁷ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 204.

¹⁸ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China]

science, education, philosophy, business, and medicine. Also, some of them choose to study arts and music¹⁹.

Third, most Chinese students have a strong patriotic mindset, whether government-funded or self-funded. Many students took the future development of China as their responsibility. So students generally work very hard in their studies and care about the political situation in China²⁰. Most of the government-funded students' future plans are to return to China, and some self-funded students also have plans to return to China after their studies. Yuan mentioned that "by 1911, more than 300-400 of the 1,000 students who studied in the United States at the beginning of the 20th century had returned to China. According to the 1937 Tsinghua Class Record, of the 1,153 students who studied in the United States, 1,131 returned to China after completing their studies. The return rate was over 98%²¹".

The difference is that the gender ratio of students has changed over time, with a gradual increase in the number of female students studying abroad. From the beginning, when women were denied access to education to the time of the Nanjing government, there were 1,733 Chinese students in the United States in 1937, of which 352 were women, accounting for 20% of the total²². Although gender inequities in education still exist.

¹⁹ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China]

²⁰ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China]

²¹ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 211.

²² Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 207.

People's Republic of China Period:

After the founding of the People's Republic of China in 1949, Chinese study abroad also entered a new phase. Compared to the number of Chinese students studying in other countries, students studying in the U.S. are the largest. Chinese student's study in the U.S. began in 1979. Chinese students' studies in the U.S. were temporarily suspended due to the antagonistic relations between China and the U.S. before 1979. In 1979, China and the U.S. formally established diplomatic relations. 1978 was also the year that the Chinese government implemented its reform and opening-up policy. In particular, the Cultural Revolution dealt a blow to China's higher education, leading to a serious talent gap in China²³. Therefore, Deng Xiaoping attached great importance to education and talent. On May 24, 1977, when he talked with two comrades from the Central Committee, he said,

"If we want to modernize, the key is that science and technology should go up......Now it seems that compared with developed countries, our science and technology, and education are 20 years behind" and On August 8 of the same year, he pointed out at a symposium on science and education: "Our country wants to catch up with the world's advanced level, where to start? I think we should start with science and education²⁴".

Because the United States, as a superpower at the time, had high-quality science and technology and education resources. In order to foster China's development, it is crucial for the Chinese government to send students to the United States. In the book *General History of Chinese Study Abroad in the People's Republic of China* written by Tian and Liu, "In July 1978, Fang Yi, then Vice Premier of the State Council, met with Frank Press, the advisor of science and technology of the U.S. President, in Beijing, and one of the topics was the exchange of students

²³ Yuan and Li eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China], 185

²⁴ Deng Xiaoping 邓小平, Deng Xiaoping Wen Xuan Di Er Bian 邓小平文选第二编. [Selected Works of Deng Xiaoping] (Bei jing: Ren min chu ban she, 1983), 40–48.

between China and the U.S.²⁵". "The first group of Chinese students to study in the United States was sent on the eve of Deng Xiaoping's visit to the United States". This group of 50 students was the first group of students from mainland China to go to the United States after 1949 and marked the beginning of a new phase of education in the United States. In addition to government and self-funded studies, the number of pathways for Chinese students to study in the United States has expanded.

In the 1980s, many scholarship programs were also established between the United States and China with the support of Chinese-Americans and other people. These scholarship programs were used to help Chinese students explore study in the U.S. opportunities by providing assistance with study opportunities and financial assistance. The earliest study abroad program is CUSPEA, the China-United States Physics Examination and Application Program (CUSPEA). CUSPEA has created opportunities for many Chinese best physics students to receive a better education in the U.S. These students have been admitted to universities with excellent educational resources in the United States. Some universities that have accepted more Chinese students include Carnegie Mellon University, Cornell University, Columbia University, Johns Hopkins University, New York University, and the University of Chicago, with a total of 915 students sponsored by CUSPEA during the decade 1979-1989²⁶. Another program supported by Ford Foundation also helps train people in China in economic management, law, and international relations. These programs helped bring China and the U.S. closer together and

²⁵ Tian Tao 田涛, Liu Xiaoqin 刘晓琴, and Li Xisuo李喜所, eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Xin Zhong Guo Juan, 中国留学通史新中国卷 [General History of Chinese Study Abroad in the People's Republic of China] (Guangzhou Shi: Guangdong jiao yu chu ban she, 2010), 343.

²⁶ Tian Tao 田涛, Liu Xiaoqin 刘晓琴, and Li Xisuo李喜所, eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Xin Zhong Guo Juan, 中国留学通史新中国卷 [General History of Chinese Study Abroad in the People's Republic of China] 351-356.

created more opportunities for Chinese students to study in the U.S. during the early years of reform and opening-up.

The increasing number of government-funded study opportunities has also stimulated self-funded students' study in the United States. The Visa type is different for government-funded and self-funded studies. The majority of government-funded students are on J-1 visas, while a small number are on F-1 visas. But self-funded students are almost always on F-1 visas. According to Yue's doctoral dissertation, she introduced the different kinds of student visas in the U.S.,

"J-1 visa is a non-immigrant visa issued by the USCIS for foreign nationals to study and conduct research in the United States. J-1 visa holders are generally students, scholars, or researchers who come to the U.S. on an exchange basis according to an agreement between the two governments or an inter-university (unit) exchange agreement between the two countries. They are sponsored by both (or either) governments or institutions. Under U.S. immigration law, J-1 visa holders are generally required to remain in the U.S. for no more than three years, at the end of which they must return to the sending country to fulfill their two-year service obligation. The F-1 visa is a student visa issued to international students coming to the United States for academic study. F-1 visa holders are essentially students sponsored or self-funded by family to study for a degree in the United States²⁷".

In the case of government-funded students, the most suitable students are selected through selection and testing, and the number of opportunities is limited. These students need not only good grades but also strong general skills. Although some government-funded students are on F-1 visas, self-funded students are still the bulk of the F1 visa population.

Yue mentioned in her doctoral dissertation that in 1979, J1 visa holders accounted for 60.7% of all Chinese students studying in the U.S., and F1 visa holders accounted for 39.3%. In 1998, the percentage of J1 visa holders was 31.6%, and the percentage of F1 was 68.4% in 2013,

²⁷ Yue 岳婷婷, 改革开放以来的留美教育研究"The Research of China Overseas Education in America since the Reform and Opening-Up" (Doctoral dissertation, Nankai University, 2015), 158.

the percentage of J1 visa holders was 13.6%. According to Chinese statistics, the percentage of F1 visa holders was 86.4% since the resumption of education in the U.S. in 1978. By the end of 2000, among Chinese students studying in the US, government-founded and self-funded students account for 8.0% and 63.9% respectively²⁸. Self-funded students have become the majority of students who come to the U.S. to study. The status of Chinese students in the U.S. has also diversified, including students coming to the U.S. for a degree and some visiting scholars and language students. Language students are mainly government-funded and self-funded students who need to improve their English skills. More and more students are pursuing bachelor's degrees and master's degrees. Tian and Liu mentioned that "students from mainland China attend public and four-year universities, with correspondingly higher academic standards".

According to the data provided by Liu from Open Doors, "during 1997-1998, 83.5% of Chinese students came to the U.S. for master's degrees²⁹". According to a National Science Foundation survey, the number of Chinese students getting Ph.D. degrees in engineering and science at U.S. colleges between 1988 and 1996 was 16,550, about 7.5% of the overall number of engineering and science doctorates (219,644). In the natural sciences and engineering, a large proportion of Chinese students acquire doctorates, with 13% of physics doctorates and 15% of mathematics doctorates awarded to Chinese students³⁰. The total number of Chinese students

²⁸ Yue 岳婷婷, 改革开放以来的留美教育研究"The Research of China Overseas Education in America since the Reform and Opening-Up" (Doctoral dissertation, Nankai University, 2015), 158.

²⁹ Tian, Liu, and Li, Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Xin Zhong Guo Juan, 中国留学通史新中国卷 [General History of Chinese Study Abroad in the People's Republic of China] (Guangzhou Shi: Guangdong jiao yu chu ban she, 2010), 373.

³⁰ Tian, Liu, and Li, Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Xin Zhong Guo Juan, 中国留学通史新中国卷 [General History of Chinese Study Abroad in the People's Republic of China] (Guangzhou Shi: Guangdong jiao yu chu ban she, 2010), 374.

studying in the United States has likewise been on an upward trend, with 1,330 Chinese students in the United States in 1979 and 372,532³¹ Chinese students in the United States in 2019-2020³², a 280-fold increase.

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³¹ Open Doors is a comprehensive information resource on international students and scholars studying or teaching at higher education institutions in the United States, and U.S. students studying abroad for academic credit at their home colleges or universities. This survey of international exchange activity in the United States is sponsored by the U.S. Department of State with funding provided by the U.S. Government and supported in its implementation by IIE.

³² "Open-Doors-2020-Fast-Facts.Pdf." Accessed December 1, 2022. https://opendoorsdata.org/wp-content/uploads/2020/05/Open-Doors-2020-Fast-Facts.pdf.

Chapter 2

Reasons for the increase in the number of Chinese students studying in the United States

After China's reform and opening up, the detente between China and the United States led to an increase in Chinese student enrollment in the United States. It has since become common for Chinese students to study in the United States. Chinese students have become the largest component of international students in the United States. In 2019-2020, Chinese students in the United States accounted for 34.6 percent of all students studying in the United States³³. Self-funded students with F1 status visas have become the majority of Chinese students studying in the United States³⁴. The reasons for Chinese students to study in the United States are also more complex than in the previous three periods before the founding of the People's Republic of China. This chapter will mainly analyze why Chinese students study in the United States with the Push-Pull theory.

"Push and pull theory" is one of the important theories in studying the floating population and immigrants, which helps to explain Chinese student decision-making. Bodycott and Lai argued in the article "The Influence and Implications of Chinese Culture in the Decision to Undertake Cross-Border Higher Education", that "Push factors are those that operate within a country and initiate a student's decision to undertake study abroad³⁵". In this chapter, I argue that

³³ Open-Doors-2020-Fast-Facts.Pdf." Accessed December 1, 2022. https://opendoorsdata.org/wp-content/uploads/2020/05/Open-Doors-2020-Fast-Facts.pdf.

³⁴ New Oriental#'s 2020 Report on Chinese Students' Overseas Study

³⁵ Peter Bodycott and Ada Lai, "The Influence and Implications of Chinese Culture in the Decision to Undertake Cross-Border Higher Education," Journal of Studies in International Education 16, no. 3 (July 2012): 254, https://doi.org/10.1177/1028315311418517.

important push factors include Gaokao, Hukou, and the role of the Study Abroad Agency. In the article, "The Push-Pull Factors Influencing International Student Selection of Education Destination", Mazzarol, and Soutar argued, "Pull factors operate within a host country to make that country relatively attractive to international students³⁶". In this chapter, I argue that important pull factors include high-quality educational resources in the United States, recognition of American education in China, and the English language advantage of the United States.

Push Factor:

China's College Entrance Examination System (Gaokao)

In the Chinese education system, students need to complete six years of elementary school, three years of middle school, and three years of high school, and then they will have the college entrance exam (*gaokao*). Abdulghani³⁷ and Sang³⁸ pointed out in the article, "The Push-Pull Factors Influencing International Student Selection of Education Destination", 'This exam is interpreted as a "high-stake test", and is a curriculum-based exam that "tests students" mastery of the subjects taught in high school³⁹. The exam is held every year in June, and the overall score of the college entrance exam is the deciding factor in determining a student's choice of university in China. Abdulghani and Sang argued,

³⁶ Mazzarol, Tim, and Geoffrey Soutar. "The Push-Pull Factors Influencing International Student Selection of Education Destination." *International Journal of Educational Management* 16 (January 1, 2002): 83.

³⁷ Abdulghani Muthanna is the associate Professor of Science and Technology, Norwegian University

³⁸ Guoyuan Sang is faculty of Education, Beijing Normal University

³⁹ Abdulghani Muthanna and Guoyuan Sang, "Undergraduate Chinese Students' Perspectives on *Gaokao* Examination: Strengths, Weaknesses, and Implications," International Journal of Research Studies in Education 4, no. 5 (June 6, 2015): 4, https://doi.org/10.5861/ijrse.2015.1224.

"In current China, the test score is the decision maker of an examinee's college. In other words, the higher the score, the higher ranking university will be selected for that score achiever. The scores, as the current *gaokao* policy stipulates follow this format: "3 + X". The "3" stands for a total of 450 points distributed as follows: 150 for Chinese, 150 for Math, and 150 for foreign language (mainly English). The "X" element refers to the other 300 points that are granted on one comprehensive subjects test. However, the test applicants have the option to choose among subjects depending on their future interests⁴⁰".

Although the X in the gaokao is meant to encourage students to develop their interests and choose subjects that are more interesting to them or related to what they want to study in college, the importance of the gaokao and the emphasis on scores have led to the education in schools to pay more attention to the test subjects rather than the overall cultivation of students, such as the cultivation of student's character and interests. In Abdulghani and Snag's article, one of the interviewees mentioned, "We are too much concerned with the gaokao since our primary schools. All family members and school teachers instruct and concentrate on how to pass the gaokao. We do not get a chance to take care of our personalities or develop at least a particular talent. I know lots of classmates who are really talented in many things but their talents are perished by the preparation for the gaokao⁴¹" and another interviewee said, "The gaokao test is OK but the problem is that it does not help us in developing our personalities well ... It does not focus on creating talented students. There are many talents in China who might get destroyed by such a test. In fact, the test does not examine whether I am talented or not"42. In the article "A New Idea for Reforming the University Entrance Examination in China" published by Journal of Shanghai University Yan and Yao contend in the article, "A New Idea for Reforming the

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⁴⁰ Muthanna and Sang, "Undergraduate Chinese Students' Perspectives on *Gaokao* Examination," 4.

⁴¹ Muthanna and Sang, "Undergraduate Chinese Students' Perspectives on *Gaokao* Examination," 9.

⁴² Muthanna and Sang, "Undergraduate Chinese Students' Perspectives on *Gaokao* Examination," 9.

University Entrance Examination in China" that "gaokao focuses on public courses (e.g. Chinese and English) rather than on professional courses (science courses). They suggested that the test should examine students' interests in different professions. It also implies that there should not be any compulsory courses tests⁴³". Bodycott mentioned how Chinese students think about Chinese education, "The most common views were that the programs are 'too rigid', the teaching approaches and learning style are 'traditional', they 'lack a student focus' and the programs do not have 'international experiences' Therefore, from this analysis, it seems likely that studying abroad becomes an option for students who emphasize the nurturing of learning excitement, research curiosity, and personality development over academic performance.

Secondly, the emphasis on *gaokao* makes many Chinese students feel highly stressed. The event of such a test could seriously be the most critical one in the lives of Chinese youth and parents who care a lot about their children's future. Millions of students apply for such a test. According to the news on June 7, 2021, published by XinhuaNet, "In 2021, about 10.78 million graduating seniors across China took this test⁴⁵". In my opinion, students care more about the exam result than anything. Parents and schools are also placing more emphasis on the *gaokao* than they should.

Anecdotally, it appears that some people even consider that the *gaokao* can determine one's class and social status after high school. Many ordinary students born in small cities see the

⁴³ Li Xue-Yan; Long Yao. A New Idea for Reforming the University Entrance Examination in China[J]. Journal of Shanghai University (Social Science Edition) 132-143.

⁴⁴ Peter Bodycott and Ada Lai, "The Influence and Implications of Chinese Culture in the Decision to Undertake Cross-Border Higher Education," 359.

⁴⁵ Bochao Liu and Qianer Tang, "10.78 Million Students Will Take the 2021 *Gaokao*," XinhuaNet, June 7, 2021.

college entrance exam as "an exam to change their fate". Abdulghani and Sang's interviewee Sun mentioned.

"I spent almost a year away from my family members, friends, mates, and even teachers; I was locking myself in my room preparing myself for the test. I had a mix of feelings then; a feeling of perseverance and that is OK, but I felt also like I am living in a world of my own, a world full of misery as all of them (parents, friends, and teachers) expect me to achieve the best score. That was a lot of pressure on me⁴⁶"!

In Siegel's article "Stressful Times for Chinese Students", published in the Times on June 12, 2007, it was mentioned that "Every year, Chinese newspapers fill up with tragic tales of exam-time suicides". "The *gaokao* is about the most pressure-packed examination in the world", says Ari Wolfe, an English teacher in Guangzhou, "given the numbers, the repercussions, and the stress involved⁴⁷". So the tremendous pressure generated by the *gaokao* scares many students, and studying abroad appears as a way to avoid *gaokao*.

In Chen's article, "Three Levels of Push-Pull Dynamics Among Chinese International Students' Decision to Study Abroad in the Canadian Context", one of his interviewees mentioned their story about *gaokao*,

"When I was in middle school, my parents decided to send me to international schools, like the English education system. So, I was there for three years of high school study, and then my dad didn't want me to take the Chinese university entrance exam because it was tough, and then that exam decides your life. So, my dad really didn't want me to get stressed out, so he just want to send me abroad⁴⁸".

⁴⁶ Muthanna and Sang, "Undergraduate Chinese Students' Perspectives on *Gaokao* Examination." 8.

⁴⁷ Benjamin Siegel, "Breaking News, Analysis, Politics, Blogs, News Photos, Video, Tech Reviews," Time, June 12, 2007, http://content.time.com/time/world/article/0,8599,1631854,00.html.

⁴⁸ Jun Mian Chen, "Three Levels of Push-Pull Dynamics among Chinese International Students' Decision to Study Abroad in the Canadian Context," Journal of International Students 7, no. 1 (2017): 125, https://eric.ed.gov/?id=EJ1125723.

In contrast, Chinese students going to study in the U.S. only need to take the SAT (Scholastic Aptitude Test), a standardized test widely used for college admissions in the United States, and an English test, TOEFL or IELTS. These exams can be taken multiple times to get their best scores to apply for college, while the *gaokao* is only once a year. So studying abroad takes a lot of pressure off of Chinese students.

Household Registration System (Hukou), Gaokao, and International School

It is important to define *Hukou* and other terms I used in more detail before discussing its complicated influence on student decision-making.

Hukou:

Hukou is an official document issued by the Chinese government, certifying that the holder is a legal resident of a particular area⁴⁹.

Resident population:

Resident population is generally defined as a population that has lived in a city for more than six months and is economically tied to it. The resident population may or may not have a $hukou^{50}$.

Migration:

In this senior project, I use "Migration" to refer to internal migration within China, where Chinese people move from one city to another to live.

In this section, I argue that the complex relationship between *hukou* and *gaokao* serves as a motivating reason for many Chinese students to study abroad. However, this has not been discussed in any other sources. *Hukou* has long been a social concern in China because it impacts everyone in China. There is a large literature discusses *hukou* issues, such as "Social identity and

⁴⁹ Definition from Oxford Languages.

⁵⁰ Definition comes from Chinese National Bureau of Statistics

inequality: The impact of China's *hukou* system" by Afraid, Li, and Ren⁵¹, "*Hukou* and highways the impact of China's spatial development policies on urbanization and regional inequality" by Rosker, Deichmann, and Roberts⁵², "Educational Inequality under China's Rural-Urban Divide: The *Hukou* System and Return to Education" by Fu and Ren⁵³. This literature tends to focus on examining the hierarchical differentiation of citizenship, inequality of citizens' income, and inequality of citizens' right to education due to China's *hukou* system. It is generally founded on an examination of the impact of *hukou* on the "low-income group of people". For instance, the education challenges of migrant workers' children due to *hukou*, the income inequality of people within cities due to *hukou*, and the stratification of status classes by *hukou*. Despite the complexity of the relationship between *hukou* and education, the decisions made by wealthy people without *hukou* are neglected.

The reasons that have been neglected, in my opinion, are because among the vast number of floating population in China, the difficulties of the right to education caused by *hukou* are only one of the multiple difficulties, and inequality of income and social welfare caused by *hukou* has attracted more people's attention. As for difficulties in the right to education caused by *hukou*, the rich population who can afford to study abroad accounts for a very small minority in China, while the population with difficulties in education caused by *hukou* is the majority. Social

⁵¹ Afridi, Farzana, Sherry Li, and Yufei Ren. "Social Identity and Inequality: The Impact of China's Hukou System." *Journal of Public Economics* 123 (January 1, 2012). https://doi.org/10.1016/j.jpubeco.2014.12.011.

⁵² Maarten Bosker, Uwe Deichmann, and Mark Roberts, "Hukou and Highways the Impact of China's Spatial Development Policies on Urbanization and Regional Inequality," Regional Science and Urban Economics 71 (July 2018): 91–109, https://doi.org/10.1016/j.regsciurbeco.2018.05.007.

⁵³ Fu, Qiang, and Qiang Ren. "Educational Inequality under China's Rural–Urban Divide: The Hukou System and Return to Education." *Environment and Planning A* 42 (March 1, 2010): 592–610. https://doi.org/10.1068/a42101.

problems that most people are experiencing are always discussed and explored first. Therefore, I will analyze the phenomenon of studying abroad caused by *hukou* among the economically well-off population groups in China based on my own observation and study.

China began a household registration system in 1958, Qiao, Cheng, and Qian quoted from Liang, Li, and Ma in the article, *Hukou*, marriage, and access to wealth in Shanghai, "It (*Hukou*) has divided the Chinese population into where they live and whether they are agricultural (rural) and non-agricultural (urban), with newborns following *hukou* type and locale of their parents⁵⁴" The quotation Qian and Qian used to explain *hukou*,

"To be clear, individuals' *hukou* status entails two parts: the type of registration (urban vs. rural) and the place of registration (local vs. nonlocal)" (Chan 2012). With the decentralization of *hukou* management to the local governments and the abolishment of the rural and urban *hukou* distinction in some provinces and cities, the value of *hukou* as well as *hukou*-based stratification has been increasingly linked to the place of the registration rather than the type of *hukou* registration, especially in big cities, such as Shanghai and Beijing. (Li, Li, and Chen [25]; Song [29])⁵⁵

Numerous rights of Chinese residents are related to the *hukou* system, including social welfare, marriage registration, housing purchase, and the right to education. In the book *China Urbanizes: Consequences, Strategies, and Policies* Shahid Yusuf and Anthony Saich argued, "*hukou* provides access to jobs, housing, food, and state-sponsored benefits. The *hukou* location specifies where one is entitled to receive benefits; in essence, it defines where one belongs".

Hukou also has a clear impact on students' high school education decisions. The Chinese government regulates that a person with a *hukou* in a city can attend public high school and take

⁵⁴ Zhenchao Qian, Yuan Cheng, and Yue Qian, "*Hukou* , Marriage, and Access to Wealth in Shanghai," Journal of Ethnic and Migration Studies 46, no. 18 (November 2, 2020): 3920, https://doi.org/10.1080/1369183X.2019.1592883.

⁵⁵ Yue Qian and Zhenchao Qian, "Assortative Mating by Education and *Hukou* in Shanghai," Chinese Sociological Review 49, no. 3 (July 3, 2017): 240, https://doi.org/10.1080/21620555.2017.1288066.

the *gaokao* in that city and only in that city. Wang and Gu, in the article "Concerned about the Education of Children of the Migrant Population, Hoping For the Beauty of Harmony", mentioned,

"Due to the long-standing urban-rural household registration in China and the separation of the dualistic right of residence and household registration, the right to compulsory education is linked to the household registration. Although the dualistic social structure in China tends to weaken with the development of the market economy, there has not yet been a fundamental change, and accordingly, compulsory education still has obvious dualistic characteristics, so the phenomenon that the right to education in the place of residence does not necessarily mean the right to education in the place of residence arises⁵⁶."

I divide Chinese high schools into two types according to their nature: public and private high schools. The distinction is that public high schools are funded by the government. Private schools are funded by private individuals or institutions and are approved by the local government and education department. Public high schools have lower tuition costs than private high schools. But one of the most important differences is the direct connection between high schools and *hukou*; students can only attend public schools in the place that they registered permanent residence, which means the place they have *hukou*.

Private schools do not have a *hukou* requirement. Students can attend private schools in any city in China. There are also various private schools, including private vocational high schools and private art high schools. However, there is one form of high school that is closely tied to studying abroad: international high schools. This type of school is distinct from other types. It is the only high school in which students are not required to take *gaokao*, and the

⁵⁶ Wang Yadong and Gu Weye 王亚冬and 顾维页, Guan Zhu Liu Dong Ren Kou Zi Nv Jiao Yu Wen Ti, Qi Pan He Xie Zhi Mei 关注流动人口子女教育问题, 创造和谐之美 [Concerned about the Education of Children of the Migrant Population, Hoping For the Beauty of Harmony] (Modern Enterprise Education 05 (2006): 161

subjects they study in high school are also relevant to studying abroad. Additionally, private international schools are the most expensive type of private high school.

Because of the correlation between *hukou* and education, many students who live in cities but do not have a *hukou* in their city cannot attend local public high schools and take *gaokao* in the city they live in. Wang and Gu also mentioned, "After the reform and opening-up, China's urbanization process has accelerated, and a large number of migrant workers have moved to the big cities and made great contributions to the construction and development of the cities, while their children are often rejected by the local education departments in most of their cities⁵⁷". It is common for the children of migrant groups without *hukou* to receive a high school education.

Due to unequal economic development, China's rural cities are characterized by a wide disparity between the wealthy and the poor. Therefore, many Chinese people migrate to other cities, such as Beijing and Shanghai, in search of employment possibilities. These cities have a substantial immigrant population. Migrants do not have a *hukou* of the city they live in, but they are also inhabitants of the city. According to a press conference given by the Information Office of Beijing Municipal People's Government, the data findings of the "Seventh Census", "the resident population of Beijing was 21.893 million on November 1, 2020. The migrant population from other cities is 7,456,000, accounting for 34.6% of the resident population. The resident population of Shanghai is 24,870 million, while the migrant population accounts for 42,14 percent of the city's population solution.

⁵⁷ Wang Yadong and Gu Weye 王亚冬and 顾维页, Guan Zhu Liu Dong Ren Kou Zi Nv Jiao Yu Wen Ti, Qi Pan He Xie Zhi Mei 关注流动人口子女教育问题, 创造和谐之美 [Concerned about the Education of Children of the Migrant Population, Hoping For the Beauty of Harmony] 161.

⁵⁸ Data is form "Bulletin of the 7th National Census of Beijing" (The People's Government of Beijing Municipality, May 19, 2021), http://www.beijing.gov.cn/gongkai/shuju/sjjd/202105/t20210519 2392888.html.

In the developed cities, the lives of the migrant population are also quite uneven, and for some life is difficult. According to Qian, Cheng, and Qian quoted in Wu and Treiman, "A large number of migrants look for jobs in cities with different fortunes: some leave shortly after without much success; many only afford to live in temporary homes or dormitories; a few manage to live permanently, and a very small few gain access to *hukou* and own homes in cities⁵⁹". But for cities like Shanghai and Beijing, with good economic development and more job opportunities. Some people have also become rich because they have found suitable jobs and their living standards have improved.

According to Gotohui data⁶⁰ on the distribution of the number of high-income households (High-income families are defined as those who earn at least 400,000 RMB a year⁶¹, approximately \$57,000 U.S. dollars) in Chinese cities, Beijing and Shanghai are in first and second place in the ranking, respectively. There are 5,224,000 households in Beijing, and on there are 5,088,000 households in Shanghai with an annual income of not less than 400,000 RMB⁶². Moreover, in the ranking of Chinese cities by the number of households with total savings of 6 million RMB (approximately \$854,358 U.S. dollars), Beijing has 728,000 households, and Shanghai has 621,000 households, ranking first and second, respectively⁶³. According to the Statistical Bulletin of Beijing's National Economic and Social Development in

⁵⁹ Zhenchao Qian, Yuan Cheng, and Yue Qian, "*Hukou*, Marriage, and Access to Wealth in Shanghai," 3920-3921

⁶⁰ Gotohui Data is China's database to provide national city housing prices and macro data query, including housing price data, GDP data, population data, economic data, city, industry, financial taxation, foreign trade, education, and other macro data.

⁶¹ The definition of affluent population comes from Gotohui Data

⁶² Gotohui Data https://m.gotohui.com/ndata/list/170759.html

⁶³ Gotohui Data https://life.gotohui.com/topic-339

2021⁶⁴, the per capita disposable income of the city's residents was 75,002 RMB (approximately \$10,679 U.S. dollars). The comparison of the above data shows that there are many economically wealthy families in Beijing and Shanghai. While I have not found data that specifically link wealth to *hukou*, it is clear that a substantial number of wealthy families do not have local *hukou*.

Therefore, for the problem of students who live in a city but do not have an urban residence to attend a public high school, I argue there are three kinds of solutions. One is for students to return to the high school where they have a *hukou*. Two, the student attends a private high school in the city of residence. Three, the students attend a private international high school in their city of residence. Each solution has advantages and downsides, and their family's financial situation often influences students' and parents' decisions.

Anecdotal evidence suggests that families with lower incomes choose to attend high school in their *hukou* city, which is the least expensive alternative. However, it is challenging for a family to relocate to another place because it requires them to leave their current stable existence, move as a unit, and find new homes and employment. Families with a median income may attend a private high school in the city where they live. However, the difficulty is that there is also a connection between the *hukou* and the *gaokao*. Students who take the *gaokao* can only take it in the city where they have the *hukou*. Due to the uneven distribution of population and educational resources, the difficulty levels of the *gaokao* and the score line for college entrance are different from province to province. This adds even more pressure on students studying out of the province where they have *hukou*. This is one of the most convincing explanations for why

⁶⁴ "北京市2021年国民经济和社会发展统计公报_年度统计公报_首都之窗_北京市人民政府门户网站." [Beijing 2021 National Economic and Social Development Statistical Bulletin_Annual Statistical Bulletin_Window to the Capital_Portal of the People's Government of Beijing.] Accessed December 3, 2022.

http://www.beijing.gov.cn/gongkai/shuju/tjgb/202203/t20220301 2618806.html.

private international high schools have become the choice of some wealthy families without *hukou*. Students who choose international schools don't need to worry about the *hukou* or the *gaokao* because they plan to study abroad. However, the tuition is significantly higher than that of the other two categories of high schools. According to a report on Sohu.com, the annual tuition for Beijing's public high schools is between 700 and 1600 RMB. According to the tuition information listed on the website of an international private school, the annual tuition is 220,000 RMB. It is evident that there is a significant difference between the tuition costs of these two kinds of schools. The high tuition fees of international private schools make it only an option for a few wealthy families.

So regardless of financial pressure, studying abroad is the most convenient and straightforward option. The number of international schools in China has been growing in recent years. In Qu's article "The International Educational Situation In the Post-Epidemic Period" published in Studying Abroad, a professional magazine about the content of study abroad information. She wrote,

"According to the 2020 China International School Development Report released by NewSchool Insight Media shows that the total number of accredited international schools in mainland China is currently 907, including 113 schools for children of foreigners (who has nationality of other countries), 535 private international schools, and 259 international departments of public schools. Two thousand twenty new accredited international schools The number of students who study in international schools in 2020 is 610,000; 75% of these students are in private international schools⁶⁵".

It can also be seen from the data that there are a lot of students who choose to go to private international high schools. The decision to choose a private international school must be made after a comprehensive consideration by a family. Still, the *hukou* is one of the factors that is likely to drive a student to choose an international school and study abroad.

⁶⁵ Qu Qi, 屈琦, Hou Yi Qing Shi Qi Guo Ji Jiao Yu Tai Shi Xiang Jie, 后疫情时期国际教育态势详解 [The International Educational Situation In the Post-Epidemic Period] Studying Abroad Magazien 13 (July 5, 2021): 63.

Study Abroad Agency

In addition to the *gaokao* and *hukou* as push factors for Chinese students to study abroad, the increase in the number of study abroad agencies has also become one of the major push factors for the rise in the number of Chinese study abroad students. In the article, "The Use of Agents in Recruiting Chinese Undergraduates" Hagedorn and Zhang described how, "In China, agents are often hired to assist students in finding an international institution fitting their academic goals. An education agent is a third-party entity that is paid to assist a student in finding, apply to, and or prepare for college⁶⁶". Study abroad agencies help people with study abroad needs by charging a fee.

Hagedorn and Zhang surveyed whether Chinese students would choose an agency to study abroad. In this survey, "the researchers met more than 500 students from the five different schools. A paper-based survey written in Chinese was hand-delivered to each student. A total of 471 students completed the survey, and 314 students planned to pursue a degree in a foreign institution". Hagedorn and Zhang mentioned, "participants were asked to provide multiple reasons why they chose to or planned to use an agent. The most popular reason, cited by 66% of the agent-assisted participants, was that they possessed little knowledge regarding the college application process in foreign countries, Lack of knowledge in visa application and less information on foreign colleges and universities were reported as the second and the third reasons by the participants⁶⁷. The advantage of study abroad agencies is that they have more comprehensive and detailed information about studying abroad and more experience in applying

⁶⁶ Linda Serra Hagedorn and Leaf Yi Zhang, "The Use of Agents in Recruiting Chinese Undergraduates," Journal of Studies in International Education 15, no. 2 (May 2011): 186, https://doi.org/10.1177/1028315310385460.

⁶⁷ Serra Hagedorn and Zhang, "The Use of Agents in Recruiting Chinese Undergraduates," 190-193.

for study abroad, so they attract many students. In his chapter on Study Abroad agencies in China, Mark McCormick (quoting Özturgut) states that,

"Study abroad agencies are thought to have several advantages when sending students abroad. Agencies know the language and the culture of the sending and receiving countries, are cost-effective and helpful for the universities and improve the quality of applications by vetting local students. They also help with providing counseling for students and their families, help arrange visa applications, and provide assistance for test prep, among other services".

Many study abroad agencies will include a careful process for the study abroad application process on their official websites. For example, for students with undergraduate study abroad needs, the process is basically divided into seven steps. The first step is to find out what majors the student is interested in applying to and to determine the direction of the application. The second step is to make academic guidance for students according to their application direction and plan the courses they need to take. Like TOEFL and SAT. The third step is to help applicants get some competition medals, or some internship experience, to make their background more competitive. The fourth step is to formally begin preparing the application materials, such as helping students with essays and interview coaching. The fifth step is to choose a suitable university from the admissions offers received and help the applicant apply for a student visa. The sixth step is some guidance for students before entering the school, such as the precautions for studying abroad. The final step is the student's entry into the country and successful enrollment⁶⁸. This detailed study abroad application helps attract many students. The comprehensive nature of the services offered by study abroad agencies also allows students to feel that having the help of an agency can improve their chances of being accepted and help with the difficulties students encounter during the application process.

⁶⁸ The content is from the official website of a well-known Chinese study abroad agency, and the brand name will not be exposed in this project to protect the brand information

Hagedorn and Zhang mention the major difficulties encountered by students during application preparation, "No matter if an agent was involved in the application process, students contended the most challenging part of the application process was preparing for the standardized English-language tests typically required of all international applicants to universities in the United States and other English-speaking countries⁶⁹". So many study abroad agencies also offer English tutoring. English tutoring at study-abroad agencies also makes the process of applying for study abroad much smoother. It is my argument that study abroad agencies create the impression that students who pay the I study abroad agency will be more successful in finding opportunities.

The increasing variety of study-abroad agencies in China also provides better services to students planning to study abroad. In addition to traditional study abroad agencies, in recent years, there are also emerging study abroad agencies, background enhancement agencies, and post-study abroad agencies. Traditional study abroad agencies have a long history of development, are well established, have a large number of branches, have high brand recognition, and are relatively more risk-resistant⁷⁰, but the disadvantage of these agencies is that they have a large number of clients and students may not be able to get complete one-on-one guidance. Emerging study abroad agencies make up for this by being "small and medium-sized study abroad companies and individual studios, which often have unique advantages, such as high innovation, transparency of information, and more attentive service, and whose founders are

⁶⁹ Serra Hagedorn and Zhang, "The Use of Agents in Recruiting Chinese Undergraduates," 195.

⁷⁰ Qu Qi, 屈琦, Hou Yi Qing Shi Qi Guo Ji Jiao Yu Tai Shi Xiang Jie, 后疫情时期国际教育态势详解 [The International Educational Situation In the Post-Epidemic Period] Studying Abroad Magazine 13 (July 5, 2021): 62.

mostly young people with experience in studying abroad⁷¹". So students think that emerging study abroad agencies have a better understanding of the study abroad market and are more meticulous in their service. Emerging study abroad agencies allow their principal to achieve their study abroad goals and enjoy a great collaborative experience. The background enhancement program is a spin-off of the study abroad agencies. It is a specialized program that helps students with the ability to improve their skills or "soft skills" in addition to the "hard skills" of standardized grades, such as research projects, volunteer activities, and internship programs, which help students to enhance their resumes and improve their competitiveness. Post-study abroad agencies focus on services provided to students who have successfully applied to study abroad. Currently, most organizations in the study abroad industry focus on "pre-study⁷²". Post-study agencies offer services to Chinese students after they leave China, including course counseling in college, assistance with food, clothing, housing, transportation abroad, and internships and employment⁷³.

Study abroad agencies provide a full range of services for almost all the problems students will encounter, from the study abroad idea to the time they succeed in studying abroad. They not only solve the difficulties of studying abroad but also make it easier and more realistic. Therefore, study-abroad agencies can help students with study-abroad plans and inspire many

⁷¹ Qu Qi, 屈琦, Hou Yi Qing Shi Qi Guo Ji Jiao Yu Tai Shi Xiang Jie, 后疫情时期国际教育态势详解 [The International Educational Situation In the Post-Epidemic Period] Studying Abroad Magazine 13 (July 5, 2021): 62.

⁷² Qu Qi, 屈琦, Hou Yi Qing Shi Qi Guo Ji Jiao Yu Tai Shi Xiang Jie, 后疫情时期国际教育态势详解 [The International Educational Situation In the Post-Epidemic Period] Studying Abroad Magazine 13 (July 5, 2021): 63.

⁷³ Qu Qi, 屈琦, Hou Yi Qing Shi Qi Guo Ji Jiao Yu Tai Shi Xiang Jie, 后疫情时期国际教育态势详解 [The International Educational Situation In the Post-Epidemic Period] Studying Abroad Magazine 13 (July 5, 2021): 63.

students' ideas of studying abroad because the existence of study-abroad agencies in China makes studying abroad no longer difficult.

Pull Factor

Many variables within China are leading an increasing number of students to actively or passively choose study abroad, but the United States is always the preferred country for Chinese students. In 2019-2020, there were 372,532 Chinese students studying in the United States, representing 34.6% of the total number of students in the United States⁷⁴. According to the New Oriental 2019 Report on Chinese Students' Overseas Study, the United States is the most popular destination for Chinese students planning to study in the United States⁷⁵. Why are there so many Chinese students in the United States? There are various attractions in the United States.

Education Resources

New Oriental⁷⁶'s 2019 Report on Chinese Students' Overseas Study⁷⁷ data shows the level of education, safety issues, future employment prospects, comprehensive national strength, and language environment. According to the report, these factors are the primary considerations for Chinese students when they choose a country to study in. First, the U.S. has advanced educational resources. According to the 2021 U.S. News & World Report about which country

⁷⁴ "Open-Doors-2020-Fast-Facts.Pdf." Accessed December 1, 2022. https://opendoorsdata.org/wp-content/uploads/2020/05/Open-Doors-2020-Fast-Facts.pdf.

⁷⁵ New Oriental#'s 2019 Report on Chinese Students' Overseas Study

⁷⁶ New Oriental is a Chinese educational technology company, which focuses on English education, overseas examination training, and overseas study agency. This study abroad agency of New Oriental is an authoritative organization in China, although many people who do not know the study abroad agencies also know New Oriental. the annual report of Chinese students studying abroad by New Oriental, which is also the most comprehensive report supported by data in China

⁷⁷ New Oriental#'s 2019 Report on Chinese Students' Overseas Study

has the best education, the report is based on "whether they have a well-developed public education system, whether people would consider attending university there and if that country has top-quality universities⁷⁸". The final result of the ranking is that the U.S. is the number one country with the best education for the second year.

Moreover, the U.S. has nine of the top twenty universities in the Q.S. World University Rankings, the country's largest share. Q.S. World University Rankings have been approved by the International Ranking Expert Group (IREG), an annual university rankings publication by Quacquarelli Symonds. In the article "Study Abroad Choices of Chinese Students: Factors, Influences, and Motivations", Zwart surveyed the motivational factors of Chinese students choosing to study abroad. According to his survey of 305 college students, U.S. universities were rated by respondents as having the best academic reputation⁷⁹. Excellent educational resources became essential for attracting Chinese students to study in the United States.

Competitive Academic Background

Moreover, because of the excellent educational resources in the U.S., having a U.S. degree is also considered competitive by some Chinese people. Zwart quoted from Hai, "In researching Chinese students currently studying in the USA, found that most students only applied for American universities instead of those in Europe and Australia, firstly because they believed that higher education in the U.S. is the most advanced and most established in the world⁸⁰". According to a report by Tencent News on May 5, 2022, "the total number of

⁷⁸ "Best Countries for Education," U.S. News & World Report, 2021.

⁷⁹ Zwart, Julie. "Study Abroad Choices of Chinese Students: Factors, Influences, and Motivations." Quarterly Journal of Chinese Studies 2, no. 2 (Winter, 2013): 68-90. https://www.proquest.com/scholarly-journals/study-abroad-choices-chinese-students-factors/doc view/1517926775/se-2.

⁸⁰ Hai, Y. (2007). A study of the motivations of Chinese students in the United States: Impacts of internationalization of Chinese higher education (unpublished Master's thesis). Stanford

undergraduate graduates in 2022 is 10.76 million, and 2022 is also known as the most brutal graduation season⁸¹". Because the employment situation of graduates in China is not optimistic, the job opportunities are limited, and the competitive pressure is very high. Therefore, making their background more competitive can help graduates win the fierce job competition. According to the New Oriental's 2020 Report on Chinese Students' Overseas Study, employers prefer to hire study-abroad students, with 46% of employers having a country preference, and the U.S. is the number one employer with a preference. 65% of employers say they prefer to hire students with U.S. study experience⁸². The Zwart survey also showed that 87% of respondents believed the USA was the best path to future employment within China⁸³. An educational background at a U.S. university will make a student's resume more competitive in China, especially with a background of study at a prestigious U.S. university. A U.S. study abroad experience will allow students to improve their skills, broaden their career options, increase their future wages, and even allow them to have a higher social status.

English Language Advantage

Third, proficiency in English provides advantages for more competitive work in China.

Studying in the U.S. for Chinese students can improve their English skills and bilingual ability.

Although English is a required subject for students in China, Chinese education emphasizes

University, Palo Alto, CA, 41. quoted in Zwart, Julie. "Study Abroad Choices of Chinese Students: Factors, Influences, and Motivations". Quarterly Journal of Chinese Studies 2, no. 2 (Winter, 2013), 74.

⁸¹ "2022年被称为'最难就业年',女大学生哭诉卷的想哭,残酷又现实," [The year 2022 has been called the hardest year to get a job. It is cruel and realistic for female college students to cry]. May 5, 2022. Tencent News

https://view.inews.gg.com/k/20220505A04Z6F00?web_channel=wap&openApp=false.

⁸² New Oriental#'s 2019 Report on Chinese Students' Overseas Study 36-37

⁸³ Zwart, Julie. "Study Abroad Choices of Chinese Students: Factors, Influences and Motivations." Quarterly Journal of Chinese Studies 2 (2013): 81.

vocabulary acquisition more than the practical aspects of oral expression. Many students are critical of English education in China. In Chen's article, Three Levels of Push-Pull Dynamics Among Chinese International Students' Decision to Study Abroad Canadian Context adopts the research methods of questionnaire survey and interview. When Chen and his interviewees talk about more English lessons in China, the interviewee Aeris described,

"The practicality of English classes in China: You have to learn it (English), but I don't think it's useful. We learn the vocabulary, and we learn the skills that the Canadian people won't use now; so, actually, it's just like, we won't learn how to speak and how to communicate. We just learn something on paper.

Aeris alluded to the reality that students in China learn English by way of rote memorization. Simply learning English without engaging in natural dialogue to practice language skills hinders one's ability to communicate in a natural context in which it is used. Zanar was more explicit,

. . . they (referring to students in China) just do the paperwork, memorizing the vocabulary, and maybe pay more focus attention on grammar; but honestly, we don't practice a lot on speaking and listening. That's why lots of Chinese students, including me, the first time come here, are afraid of speaking, open our mouth to the English speaking people . . . because we don't have experience to talk, to listen in English, just read⁸⁴".

The desire for English language skills has made the United States a popular choice for Chinese students. New Oriental's 2020 Report on Chinese Students' Overseas Study shows data on personal competencies resulting from the study abroad experience. The number one ranking is language skills, accounting for 56% of all competencies⁸⁵.

⁸⁴ Jun Mian Chen, "Three Levels of Push-Pull Dynamics among Chinese International Students' Decision to Study Abroad in the Canadian Context," Journal of International Students 7, no. 1 (2017): 127, https://eric.ed.gov/?id=EJ1125723.

⁸⁵ New Oriental#'s 2019 Report on Chinese Students' Overseas Study

Reasons for the decline in the number of Chinese students studying in the United States

While the number of Chinese students studying continued to rise before Covid-19, the global outbreak has been a turning point. Compared to 372.523 Chinese students in 2019-20, 317,299 in 2020-2021 represents a 24.8% decline⁸⁶, it is the first decline in the last decade. Some of the reasons for the decline phenomenon include the restrictions on issuing student visas for Chinese students in the U.S., the fact that U.S.-China relations became more strained during former President Donald Trump's administration, the Anti-Asian violence, and the importance that Chinese students focus on safety concerns.

U.S. Injustice to Chinese Students

According to a report by Sha Hua, Karen Hao, and Melissa Korn published in the Wall Street Journal Education column on August 11, 2022, "The number of U.S. student visas issued to Chinese nationals plunged by more than 50% in the first half of 2022 compared with pre-Covid levels⁸⁷". Not only has the global spread of the disease temporarily suspended visa processing services at the U.S. Embassy in China, but the U.S. has also issued Proclamation 10043, which is widely seen as unfair by Chinese students. According to a report by CCTV News on July 6, 2021, Foreign Ministry spokesperson Zhao Lijian commented on a joint letter sent by more than 500 Chinese students to the Chinese Embassy in the U.S. about their visas to study in the U.S. being denied by the U.S. Zhao said,

⁸⁶ "Open-Doors-2020-Fast-Facts.Pdf." Accessed December 1, 2022. https://opendoorsdata.org/wp-content/uploads/2020/05/Open-Doors-2020-Fast-Facts.pdf.

⁸⁷ Sha Hua Korn Karen Hao and Melissa, "Chinese Student Visas to U.S. Tumble From Prepandemic Levels," WSJ, accessed November 20, 2022, https://www.wsj.com/articles/chinese-student-visas-to-u-s-tumble-from-prepandemic-levels-1166 0210202.

"We noticed that recently some Chinese students were denied by the U.S. side when they applied for visas to the U.S. on the grounds that they violated Proclamation 10043 signed during the Trump administration. The U.S. side has generalized the concept of national security and introduced measures to restrict Chinese students' visas to the U.S. on trumped-up charges, which seriously infringes on the legitimate rights and interests of Chinese students and completely contradicts the common desire of the people of China and the U.S., including the young generation, to conduct friendly exchanges. The U.S. side is driving backward in history to the detriment of others and itself⁸⁸".

Proclamation 10043 is a non-immigrant entry notice for Chinese students and researchers issued on May 29, 2020. The proclamation declared,

"The People's Republic of China (PRC) is engaged in a wide-ranging and heavily resourced campaign to acquire sensitive United States technologies and intellectual property, The PRC authorities use some Chinese students, mostly post-graduate students and post-doctorate researchers, to operate as non-traditional collectors of intellectual property. Thus, students or researchers from the PRC studying or researching beyond the undergraduate level who are or have been associated with the PLA are at high risk of being exploited or co-opted by the PRC authorities and provide particular cause for concern. In light of the above, I have determined that the entry of certain nationals of the PRC seeking to enter the United States pursuant to an F or J visa to study or conduct research in the United States would be detrimental to the interests of the United States

In Proclamation 10043, former President Trump restricted some Chinese students from studying in the United States. The students who were denied visas were generally Chinese scholars and were generally associated with Chinese military institutions or universities. The proclamation was widely criticized for the absence of concrete evidence and the broad characterization of Chinese students as potential spies. Some have been offered university admission but cannot complete their studies because of visa problems. Due to the unfriendly attitude of the U.S.

⁸⁸ 美方限制中国留学人员赴美签证 中国外交部: 美方开历史倒车 损人害己収.S. Restricts Chinese students' visas to the U.S. Chinese Foreign Ministry: the U.S. is Driving Backward in History to the Detriment of Others], Video, Xin Wen Zhi Bo Jian [Live News Room], n.d., https://tv.cctv.com/2020/06/03/VIDEAAZhi75zLYbFspptQftk200603.shtml.

⁸⁹ "Suspension of Entry as Nonimmigrants of Certain Students and Researchers From the People's Republic of China," Federal Register, June 4, 2020, https://www.federalregister.gov/documents/2020/06/04/2020-12217/suspension-of-entry-as-noim migrants-of-certain-students-and-researchers-from-the-peoples-republic.

toward Chinese students and the violation of their rights to study in the U.S., many Chinese students do not trust the U.S. study abroad policy. They are reluctant to apply to study in the U.S.

Safety Concerns

Second, safety in the U.S. has also been a concern for Chinese students after the Covid outbreak. Compared to China, the U.S. is considered relatively unsafe by the Chinese. This is because of the legal ownership of guns and racism in the United States. Racist sentiment against Asia reached another peak during Covid, making the Chinese feel even more uneasy. According to data from the National Report released by STOP AAPI HATE on March 4, 2022. "From March 19, 2020, to December 31, 2021, a total of 10,905 hate incidents against Asian American and Pacific Islander (AAPI) persons were reported to Stop AAPI Hate. Of the hate incidents reflected in this report, 4,632 occurred in 2020 (42.5%), and 6,273 occurred in 2021 (57.5%)"90. Among all races, Chinese Americans reported the most hate incidents accounting for 42.8% of all hate incidents. There is a strong correlation between the Chinese being the majority of hate incidents and the fact that the first case of Covid-19 was found in Wuhan, China, and that President Trump publicly used the term "Chinese virus" instead of Covid-19⁹¹. This highly racist term appears to have fed the hatred of Asian people in the community.

According to the report on Chinese Student Overseas Study 2020, The biggest concern for Chinese students is safety issues, which are a concern for 82% of Chinese students intending to study abroad. Regarding the actual problems encountered by students with study abroad

⁹⁰ "National Report (Through December 31, 2021)," Stop AAPI Hate, March 4, 2022, 1, https://stopaapihate.org/national-report-through-december-31-2021/.

⁹¹ Rogers, Katie, Lara Jakes, and Ana Swanson. "Trump Defends Using 'Chinese Virus' Label, Ignoring Growing Criticism." *The New York Times*, March 18, 2020, sec. U.S. https://www.nytimes.com/2020/03/18/us/politics/china-virus.html.

experience, safety also ranked first in 2020, rising from 49% of people worried about safety in 2018 to 55% of people in 2020⁹². In Chen's article, one of Chen's interviewees, Ayame, elaborated on her rationale for choosing University-X,

"I hear that (University-X's) business school is awesome. My first choice was York University, but I heard that the area is kind of . . . it's pretty dangerous 'cause there's many news, like gunshots and it happened in their university; and I can't say often, but sometimes it is. Sometimes, I think it's really a big problem so I didn't choose that school, although they sent me an offer. (University-X) is not big like University of Toronto, but I like small university; it makes me feel safer⁹³".

Ayame also talks about why they choose Canada rather than the U.S., "In Ayame's assessment, Canada is safe; it's safer than America. And there are fewer people, not like China there's a lot of people and it's quiet and it's good for our study. It's a good country for study. . . . They (parents) think, you know, North American countries are always providing a lot of opportunities for you and for you to discover. Not like China, you know". Chen also concluded that according to the data he collected, "Although both Canada and the United States are envisioned as a land of opportunities, the former is perceived to be a much safer place for one to study and live⁹⁴." The U.S. is less attractive to Chinese students as a study destination country year by year because of concerns about safety issues. This is despite the fact that the U.S. has a strong overall capacity and a well-developed education system. But the U.S. is not the only country in the world with these conditions. At the same time, the United Kingdom has surpassed the United States as the "first choice" for Chinese students for three years⁹⁵.

⁹² New Oriental#'s 2020 Report on Chinese Students' Overseas Study

⁹³ Chen, "Three Levels of Push-Pull Dynamics among Chinese International Students' Decision to Study Abroad in the Canadian Context," 125.

⁹⁴ Chen, "Three Levels of Push-Pull Dynamics among Chinese International Students' Decision to Study Abroad in the Canadian Context," 129.

⁹⁵ New Oriental#'s 2020 Report on Chinese Students' Overseas Study

Chapter 3

Brain Drain

Unlike the high return rate of Chinese students in the U.S. during the period of reform and opening up, the number of Chinese students staying in the U.S. has gradually increased after the self-funded students became the majority of study abroad students. The main status of Chinese students in the U.S. during the reform and opening-up period was visiting scholars with J1 visas, and those on J-1 visas had a two-year home-country physical presence requirement, which means they would be required to return to china for two years at the end of your exchange visitor program⁹⁶. Since the mid-1990s, self-funded students have rapidly become the mainstay of education in the United States. Most of the self-funded students are on F-1 visas. Although some of the government-funded students also have F-1 visas, they need to return to China to work as required. According to Chapter 6, Article 19 of the 2022 China Government Scholarship Fund's Selection and Dispatch of Overseas Students, after completion of their studies, the students should return to their home countries to fulfill their service obligations⁹⁷. Therefore, many self-funded students choose to stay in the United States after graduation because they are not subject to the J1 and government-funded student provisions.

Because of the contrast between the diverse cultural environment and the superior educational resources of the U.S. society and China in the early years of the PRC; this has led some students to choose to stay in the U.S. after seeing the more comfortable life in the U.S. The

⁹⁶ "Exchange Visitor Visa," accessed November 23, 2022, https://travel.state.gov/content/travel/en/us-visas/study/exchange.html.

⁹⁷ "2022年国家留学基金资助出国留学人员选派简章 -欢迎访问国家留学网, "National Study Abroad Fund 2022 Candidates Selection Guide - National Study Abroad Network." Accessed December 3, 2022. https://www.csc.edu.cn/article/2306.

phenomenon of more and more Chinese students staying in the United States is a brain drain for China. In particular, highly educated students choose to stay in the United States. For example, Chinese doctoral students in the United States. According to the statistics provided by Dr. Yue on the intention of doctoral Chinese students to stay in the U.S. from 1987 to 1999 (see *Table 2*).

Table 2. The intention of Doctoral Chinese Students to Stay in the U.S. From 1987 to 199998

Year	Number of PhDs in all majors	People planning to stay in the U.S.		Determined to stay in the United States	
		Number	Percentage	Number	Percentage
1987	303	168	55.4	135	44.6
1990	1224	730	48.7	506	40.7
1991	1939	1529	78.9	924	47.7
1992	2265	2000	88.3	1090	48.1
1993	2430	2143	88.2	100	44.4
1994	2788	25560	91.8	1227	44.0
1995	2992	2748	91.8	1343	44.9
1996	3221	2905	90.2	1794	55.7
1997	2480	2030	81.9	1397	56.3
1998	2615	2328	89.0	1567	59.9
1999	2400	2154	89.8	1433	59.7

Because of the contrast between the diverse cultural environment and the superior educational resources of the U.S. society and China in the early years of the PRC; this has led some students to choose to stay in the U.S. after seeing the more comfortable life in the U.S. The phenomenon

⁹⁸ Data from Science and Engineering Indicators, quote in Yue Tingting 岳婷婷, 改革开放以来的留美教育研究 "The Research of China Overseas Education in America since the Reform and Opening-Up" (Doctoral dissertation, Nankai University, 2015), 210.

of more and more Chinese students staying in the United States is a brain drain for China. In particular, highly educated students choose to stay in the United States.

Solutions:

Diaspora option

The Chinese government has also taken measures to attract talent back to China. In particular, highly educated students choose to stay in the United States. In the face of this brain drain, China used "brain circulation" to make the most of its outstanding Chinese resources in foreign countries, and it is called the "Diaspora Option". It means encouraging citizens abroad or educated immigrants to help their home countries and turn lost human capital due to brain drain into a positive force for development. David Zweig, Dr. Fung and Han mentioned in the article "Redefining the Brain Drain: China's 'Diaspora Option'" they quote from Gaillard and Gaillard,

"The 'diaspora option' reconceptualises the brain drain and the migration of scientific personnel, seeing it less as a permanent exodus or loss to the home country, but more as a form of 'brain circulation', where talent goes abroad but information circulates back to the individual's country of origin. Through scholarly, business and educational exchanges, educational migrants who prefer to stay in the host country are finding ways to participate in the economic and scientific development at home. This way, scientific collaboration ensues without people in the diaspora uprooting their lives and moving back home⁹⁹."

For example, in 1996, China's Ministry of Education established the Special Fund of the Ministry of Education for Sponsoring Overseas Students to Return to China for Short-Term Work "spring light project" (*chunhui jihua*¹⁰⁰) to support the short-term return service of

⁹⁹ Gaillard, J. and A. Gaillard (1997), 'Introduction: The International Mobility of Brains Exodus or Circulation?' Science, Technology & Society, 2(2), pp. 195–228, quoted in David Zweig, Chung Siu Fung, and Donglin Han, "Redefining the Brain Drain: China's 'Diaspora Option,'" Science, Technology and Society 13, no. 1 (May 2008): 4, https://doi.org/10.1177/097172180701300101.

^{100 &}quot;Spring Light Project" in Chinese is 春晖计划 (Chunhui jihua)

outstanding overseas students¹⁰¹. In 1998, the Ministry of Education and Li Ka-hsing's Cheung Kong Conglomerate in Hong Kong, jointly funded The Changjiang Scholars' Plan. Zweig Fung and Han explained, "This plan offered leading Chinese scientists living abroad a chance to return for one year to work on strategic research areas¹⁰²". They also mentioned, "at the end of 2000, the Ministry of Foreign Affairs issued long-term, multiple-entry visas to overseas students and scholars so they could go back and forth easily¹⁰³". These programs convert losses into available resources for Chinese talent who emigrate or choose to stay abroad. As of 2006, the Spring Light project has sponsored more than 12,000 outstanding Chinese study-abroad students and more than 140 groups to return to China for short-term work or service¹⁰⁴.

These programs have been effective in improving the brain drain in China. In addition to attracting talent back to serve in China on a short-term basis, the Chinese government has introduced programs and scholarships to attract Chinese students back to work in China. This is because the primary solution to improve the brain drain is to attract overseas talent back to work in China on a permanent or long-term basis. In the article, "There are always two voices...International Students' Intentions to Stay in the United States or Return to their Home Countries", Alberts and Hazen conducted group interviews and informal individual conversations with international students from six countries, including China, Greece, Japan, the Netherlands, and Tanzania in the United States. Alberts and Hazen mentioned,

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¹⁰¹ David Zweig, Chung Siu Fung, and Donglin Han, "Redefining the Brain Drain: China's 'Diaspora Option,'" Science, Technology and Society 13, no. 1 (May 2008): 5-6, https://doi.org/10.1177/097172180701300101.

¹⁰² Zweig, Fung, and Han, "Redefining the Brain Drain," 10.

¹⁰³ Gaillard, J. and A. Gaillard, "Introduction: The International Mobility of Brains Exodus or Circulation?"

¹⁰⁴ Yue, "The Research of China Overseas Education in America since the Reform and Opening-Up," 239.

"The participants explained that the Chinese Government offers incentives for US-educated people to return, as it is interested in gaining access to Western knowhow. In particular, those with English skills are valued as being able to promote Westernization and globalization (Dao, China). The Government offers returnees salaries that can compete with those in Western countries and provides attractive housing opportunities". Alberts and Hazens also indicate that "With the exception of the Chinese, none of the students knew of any government incentives for students to return and most reported that their governments were not concerned about "brain drain", as far as they were aware 105".

This also shows the Chinese government's need and importance for talent, especially national talent.

Talent Attraction Program

First, China has created many programs to encourage international students to return to China. For example, the Hundred Talents Program and the Thousand Talents Program.

According to Dr. Yue's dissertation,

"In 1994, the Chinese Academy of Sciences established the 'Hundred Talents Program', planning to attract and train more than 100 outstanding young academic leaders from abroad with a funding of 2 million yuan each in the last years of the 20th century. In 2008, the Program for the Introduction of Overseas High-Level Talents (i.e. the 'Thousand Talents Program') was established, with the group for the introduction of overseas high-level talents in charge of organization, leadership and coordination. It is planned to introduce and support a group of overseas high-level talents to return to China for innovation and entrepreneurship in national key innovation projects, key disciplines and key laboratories, central enterprises and state-owned commercial and financial institutions, and various parks, mainly in high-tech industrial development zones, for 5 to 10 years starting from 2008¹⁰⁶".

¹⁰⁵ Heike C. Alberts and Helen D. Hazen, "'There Are Always Two Voices...': International Students' Intentions to Stay in the United States or Return to Their Home Countries," International Migration 43, no. 3 (August 2005): 140, https://doi.org/10.1111/j.1468-2435.2005.00328.x.

¹⁰⁶ Yue, "The Research of China Overseas Education in America since the Reform and Opening-Up," 239.

Government Award for Outstanding Self-financed Student

As of July 2012, the Thousand Talents Program has brought 2,263 high-end talents in various fields¹⁰⁷. In addition to attracting Chinese students who are already in the workforce to return to China, the Chinese government has established scholarships and attraction policies for Chinese students who are still in school. In 2013, the Chinese government established the Chinese Government Award for Outstanding Self-financed Students Abroad to show the country's care for Chinese self-financed students. The scholarship will be awarded to 650 young talents each year and will be given 6,000-10,000 USD. The selection criteria for these young talents are

- 1. Applicants have a valid passport from the People's Republic of China
- 2. Applicants are in their second year of doctoral studies abroad or above.
- 3. Applicants are not older than 40 years old at the time of application.
- 4. Applicants must be of good character and academic standing.

However, on November 18, the Chinese Government Award for Outstanding Self-financed Students Abroad for 2021 was significantly adjusted. The scholarship will be divided into two categories: A is still the category described above, and B is for students who intend to return to China, and the selection criteria are basically the same as A, but the important difference is "the applicant must have decided to return to work in China." As for the life and employment of Chinese study abroad students after returning to China, the government has also given relative policies¹⁰⁸. The government will solve the problem of *hukou* in the place of work for qualified students who have study abroad experience.

¹⁰⁷ Yue, "The Research of China Overseas Education in America since the Reform and Opening-Up," 239.

¹⁰⁸ Information from China Scholarship Council https://www.csc.edu.cn/article/2170

Hukou Policy For Chinese Students

The importance of *hukou* for Chinese citizens is also reflected in Chapter 2, as it is associated with all aspects of life, including education, medical care, employment, and retirement. Having a *hukou* in a city where people live for a long time will improve their life experience and reduce many problems that arise when they do not have a *hukou*. Taking Beijing as an example, the Beijing government has issued a policy indicating that Chinese study abroad returnees who meet the application requirements of Beijing Returned Overseas Students for Beijing Work Residence Permit can obtain Beijing *Hukou*. 2021 Their application requirements are

- The applicant must receive a master's degree or above certified by the Chinese Ministry
 of Education Abroad
- 2. The applicant has studied abroad for more than 365 days
- 3. The applicant is not older than 45 (inclusive) years old
- 4. The applicant must submit application documents through the employer in Beijing within two years after returning to China
- 5. The applicant has established a formal labor relationship with the employer in Beijing and paid social insurance premiums in Beijing as required
- 6. The applicant's personal information must be consistent with the period of study abroad¹⁰⁹.

Getting a Beijing *hukou* is very difficult for Chinese citizens because Beijing has a large population from other cities and the policy of getting a *hukou* requires a high level of overall quality of applicants. Therefore, this policy provides *hukou* advantages to Chinese students who

¹⁰⁹ Information from Beijing Overseas Talent Center https://www.8610hr.cn/docs/hxfw/lxrcyjywgz/gzjzz/20220124/pc 1485507483945402368.html

want to return to their home country to look for job opportunities in first-tier cities with better development. International students also enjoy a tax-free car purchase policy, business start-up support policy, and 100,000 RMB business start-up fee from the government. Shanghai, Guangzhou, Tianjin, Hangzhou, Chengdu, and Nanjing all have similar policies to attract Chinese students to return to China.

According to the 2022 China International Students Returning to China Job Search Insight Report published by LinkedIn, the ratio of Chinese students returning to and studying abroad was 31% in 2007, and the percentage increased to 78% in 2018, with the number reaching 519,400. The brain drain from China has improved dramatically. But the report shows that 37% of Chinese students are still intent on choosing to stay overseas in 2022¹¹⁰. For Chinese students, the decision to return or stay is a dilemma. It requires a comprehensive consideration of the international situation, employment prospects, and lifestyle factors that all impact Chinese students' decisions.

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¹¹⁰ Data from 2022 China International Students Returning to China Job Search Insight Report published by LinkedIn

Conclusion

In general, the development of contemporary Chinese students studying in the United States is influenced by the two nations' bilateral relationship, domestic policies, and economic conditions. In particular, after the founding of the People's Republic of China, the establishment of diplomatic relations between China and the United States, the development of China's economy, and the Chinese government's encouragement of study abroad all contributed to the development of Chinese students studying in the United States. In the 21st century, studying abroad has been influenced by social issues in China which create additional push factors for individual families, such as the gaokao, hukou, and study-abroad agencies. Studying abroad has become a complex decision with both active and passive elements. The gaokao's pressure on Chinese students has discouraged many students from studying in Chinese universities. The complex hukou system is even more associated with the right to education, complicating high school education and gaokao for students living in cities without hukou. That provides a strong incentive for families with better financial conditions to send their children to study abroad. The comprehensive information and detailed assistance provided by Chinese study-abroad agencies make studying abroad relatively straightforward. Studying abroad is one of the most important ways to cultivate talent. So students come to the United States to receive a higher level of education, improve their professional ability, and develop an international perspective and cross-cultural communication skills; Chinese students studying in the United States with these advantages are more competitive in the Chinese job market.

The United States has grown less attractive to Chinese students with the global spread of the Covid-19 virus due to deteriorating U.S.-China relations and U.S. limitations on student visas for Chinese students. The United States adopted Proclamation 10043, which creates additional

students for Chinese students studying in the United States. In recent years, Chinese students have emphasized the significance of safety in the countries where they study. The legal possession of firearms in the United States and another wave of racial discrimination against Asian populations sparked by Covid have made them feel insecure. Personal safety and quality of life are also essential factors for Chinese students when choosing a nation to study in, alongside the country's strength and educational resources.

As an increasing number of Chinese choose to study in the United States, there is also a trend of students remaining in the country after graduation. Many highly educated individuals choose to stay in the United States, leaving China susceptible to the brain drain issue. The Chinese government has responded to the brain drain in two ways: by employing a 'brain circulation' strategy and implementing policies to encourage Chinese students to return to their home countries. First, the Chinese government has deftly facilitated short-term visits to China by overseas Chinese and foreign Chinese citizens. This is a fast method for preventing brain drain. In addition, the Chinese government has developed some welfare policies and scholarships for Chinese students to assist individuals who return to China to obtain a *hukou* in the city they work in and a business fund.

Based on the analysis of the phenomenon of Chinese students studying in the United States in the modern era, additional research is needed to investigate the American elements that influence Chinese students' post-graduation decisions to stay or leave. And how the opinions of Chinese students on the effects of the radically divergent preventive and control policies between China and the United States will affect Chinese students' decisions to study in the United States.

With the current Sino-US relationship and the continuing unsettled situation in China in the post-epidemic context, the future trend of Chinese students studying in the United States is not optimistic. However, Chinese study abroad students have played an indispensable part in China's economic and social development, as well as providing alternatives for those who face constraints because of Gaokao and Hukou. As a cultural bridge between China and the United States, Chinese students studying in the United States have become a vital factor in the sustained and healthy growth of relations between the two nations.

Bibliography

- Afridi, Farzana, Sherry Xin Li, and Yufei Ren. "Social Identity and Inequality: The Impact of China's Hukou System." *Journal of Public Economics* 123 (March 2015): 17–29. https://doi.org/10.1016/j.jpubeco.2014.12.011.
- Alberts, Heike C., and Helen D. Hazen. "There Are Always Two Voices...': International Students' Intentions to Stay in the United States or Return to Their Home Countries." *International Migration* 43, no. 3 (August 2005): 131–54.

 https://doi.org/10.1111/j.1468-2435.2005.00328.x.
- Bodycott, Peter, and Ada Lai. "The Influence and Implications of Chinese Culture in the Decision to Undertake Cross-Border Higher Education." *Journal of Studies in International Education* 16, no. 3 (July 2012): 252–70. https://doi.org/10.1177/1028315311418517.
- Bosker, Maarten, Uwe Deichmann, and Mark Roberts. "Hukou and Highways the Impact of China's Spatial Development Policies on Urbanization and Regional Inequality." *Regional Science and Urban Economics* 71 (July 2018): 91–109.
 https://doi.org/10.1016/j.regsciurbeco.2018.05.007.
- Chen, Jun Mian. "Three Levels of Push-Pull Dynamics among Chinese International Students' Decision to Study Abroad in the Canadian Context." *Journal of International Students* 7, no. 1 (2017): 113–35. https://eric.ed.gov/?id=EJ1125723.
- Deng Xiaoping 邓小平, Deng Xiaoping Wen Xuan Di Er Bian 邓小平文选第二编. [Selected Works of Deng Xiaoping] (Bei jing: Ren min chu ban she, 1983)

- Faggini, Marisa, and Anna Parziale. "The Failure of Economic Theory. Lessons from Chaos Theory." *Modern Economy*03, no. 01 (2012): 1–10. https://doi.org/10.4236/me.2012.31001.
- Federal Register. "Suspension of Entry as Nonimmigrants of Certain Students and Researchers

 From the People's Republic of China," June 4, 2020.

 https://www.federalregister.gov/documents/2020/06/04/2020-12217/suspension-of-entry-as-nonimmigrants-of-certain-students-and-researchers-from-the-peoples-republic.
- Fu, Qiang, and Qiang Ren. "Educational Inequality under China's Rural-Urban Divide: The *Hukou* System and Return to Education." *Environment and Planning A: Economy and Space* 42, no. 3 (March 2010): 592–610. https://doi.org/10.1068/a42101.
- Hu, Zexue, ed. *Zhongguo Chuan Tong Nong Ju =: Chinese Traditional Farming Tools*. Di 1 ban. Beijing Shi: Zhongguo shi dai jing ji chu ban she, 2010.
- Korn, Sha Hua, Karen Hao and Melissa. "Chinese Student Visas to U.S. Tumble From Prepandemic Levels." WSJ. Accessed November 20, 2022. https://www.wsj.com/articles/chinese-student-visas-to-u-s-tumble-from-prepandemic-levels-11660210202.
- Liang, Biying. "Boxer Indemnity Study Plan and Chinese Study Abroad Students." *Guizhou Journal of Social Sciences* 12 (1991): 45–50.
- Liu, Bochao, and Qianer Tang. "10.78 Million Students Will Take the 2021 Gaokao." *XinhuaNet*. June 7, 2021.
- Liu Jilin 刘集林 and Li Xisuo李喜所, eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Wan Qing Juan, 中国留学通史晚清卷 [General History of Chinese Study

- Abroad in the Late Qing Dynasty] (Guangzhou Shi: Guangdong jiao yu chu ban she, 2010)
- Liu Mei Xue Sheng Zhi Diao Cha留美学生之调查, [A Survey of Chinese Students Studying in the United States], Journal of Education, Vol. 17, No. 3, Education News, quoted in Tingting Yue 岳婷婷, 改革开放以来的留美教育研究 "The Research of China Overseas Education in America since the Reform and Opening-Up" (Doctoral dissertation, Nankai University, 2015).
- McCormick, Mark D. "Examining the Role of Study Abroad Agencies in Mainland China." In *Reimagining Mobility in Higher Education*, edited by Chris R. Glass and Krishna Bista, 169–78. Cham: Springer International Publishing, 2022. https://doi.org/10.1007/978-3-030-93865-9 12.
- Muthanna, Abdulghani, and Guoyuan Sang. "Undergraduate Chinese Students' Perspectives on Gaokao Examination: Strengths, Weaknesses, and Implications." *International Journal of Research Studies in Education* 4, no. 5 (June 6, 2015). https://doi.org/10.5861/ijrse.2015.1224.

New Oriental#'s 2019 Report on Chinese Students' Overseas Study

New Oriental#'s 2020 Report on Chinese Students' Overseas Study

- Qian, Yue, and Zhenchao Qian. "Assortative Mating by Education and *Hukou* in Shanghai." *Chinese Sociological Review*49, no. 3 (July 3, 2017): 239–62. https://doi.org/10.1080/21620555.2017.1288066.
- Qian, Zhenchao, Yuan Cheng, and Yue Qian. "*Hukou*, Marriage, and Access to Wealth in Shanghai." *Journal of Ethnic and Migration Studies* 46, no. 18 (November 2, 2020): 3920–36. https://doi.org/10.1080/1369183X.2019.1592883.

- Qu Qi, 屈琦, Hou Yi Qing Shi Qi Guo Ji Jiao Yu Tai Shi Xiang Jie, 后疫情时期国际教育态势 详解 [The International Educational Situation In the Post-Epidemic Period] Studying Abroad Magazine 13 (July 5, 2021)
- Rogers, Katie, Lara Jakes, and Ana Swanson. "Trump Defends Using 'Chinese Virus' Label, Ignoring Growing Criticism." *The New York Times*, March 18, 2020, sec. U.S. https://www.nytimes.com/2020/03/18/us/politics/china-virus.html.
- Serra Hagedorn, Linda, and "Leaf" Yi Zhang. "The Use of Agents in Recruiting Chinese Undergraduates." *Journal of Studies in International Education* 15, no. 2 (May 2011): 186–202. https://doi.org/10.1177/1028315310385460.
- Siegel, Benjamin. "Breaking News, Analysis, Politics, Blogs, News Photos, Video, Tech Reviews." *Time*, June 12, 2007. http://content.time.com/time/world/article/0,8599,1631854,00.html.
- Stop AAPI Hate. "National Report (Through December 31, 2021)," March 4, 2022. https://stopaapihate.org/national-report-through-december-31-2021/.
- U.S. News & World Report. "Est Countries for Education," 2021.
- U.S. restricts Chinese students' visas to the U.S. Chinese Foreign Ministry: U.S. is driving backwards in history to the detriment of others. Vedio. Xin Wen Zhi Bo Jian [Live News Room], n.d. https://tv.cctv.com/2020/06/03/VIDEAAZhi75zLYbFspptQftk200603.shtml.
- Wang Yadong and Gu Weye 王亚冬and 顾维页, Guan Zhu Liu Dong Ren Kou Zi Nv Jiao Yu Wen Ti, Qi Pan He Xie Zhi Mei 关注流动人口子女教育问题, 创造和谐之美 [Concerned about the Education of Children of the Migrant Population, Hoping For the Beauty of Harmony] (Modern Enterprise Education 05 (2006).

- Yuan Qing 元青 and Li Xisuo李喜所, eds., Zhongguo Liu Xue Tong Shi: Zhongguo Liuxue Tongshi Min Guo Juan, 中国留学通史民国卷 [General History of Chinese Study Abroad in the Republic of China] (Guangzhou Shi: Guangdong jiao yu chu ban she, 2010).
- Zweig, David, Chung Siu Fung, and Donglin Han. "Redefining the Brain Drain: China's 'Diaspora Option.'" *Science, Technology and Society* 13, no. 1 (May 2008): 1–33. https://doi.org/10.1177/097172180701300101.
- "2020 Report on Chinese Students' Overseas Study." New Oriental, 2020.
- "2022年国家留学基金资助出国留学人员选派简章 -欢迎访问国家留学网." [Introduction to the Selection of students to study abroad sponsored by the China Scholarship Fund in 2022] Accessed December 3, 2022. https://www.csc.edu.cn/article/2306.
- "Bulletin of the 7th National Census of Beijing." The People's Government of Beijing Municipality, May 19, 2021.
 - http://www.beijing.gov.cn/gongkai/shuju/sjjd/202105/t20210519_2392888.html.
- "Exchange Visitor Visa." Accessed November 23, 2022.
 - https://travel.state.gov/content/travel/en/us-visas/study/exchange.html.
- "Open-Doors-2020-Fast-Facts.Pdf." Accessed December 1, 2022.
 - https://opendoorsdata.org/wp-content/uploads/2020/05/Open-Doors-2020-Fast-Facts.pdf.
- "北京市2021年国民经济和社会发展统计公报_年度统计公报_首都之窗_北京市人民政府门户网站." [Beijing 2021 National Economic and Social Development Statistical Bulletin _ Annual Statistical Bulletin _ Window to the Capital _ Portal of the People's Government of Beijing.] Accessed December 3, 2022.
 - http://www.beijing.gov.cn/gongkai/shuju/tjgb/202203/t20220301 2618806.html.