STUDY OF CHINESE GRADUATE **STUDENTS IN THE UNITED STATES:** A MULTIDIMENSIONAL SURVEY



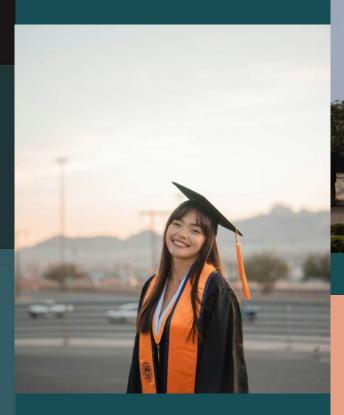
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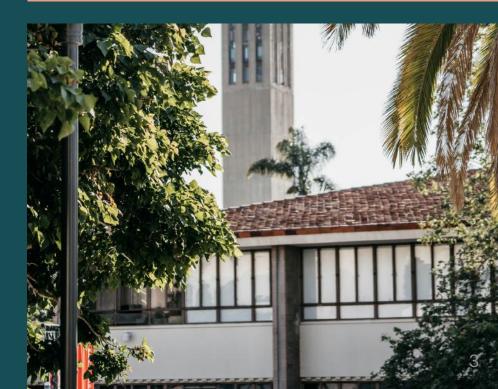
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Society Foundations for their generous sponsorship of the Chinese Graduate Students survey project. Your support has been instrumental in enabling us to gather valuable insights into the experiences and aspirations of Chinese graduate students in the United States. This project would not have been possible without your commitment to advancing research and promoting educational opportunities on a global scale. Thank you for believing in our work and for helping us make a moaningful impact

We would like to extend our deepest gratitude to Open



We would also like to express our sincere appreciation to the Center for China and Globalization (CCG) for their invaluable cooperation and guidance throughout the Chinese Graduate Students survey project. The insights and feedback provided by CCG played a significant role in shaping this study, ensuring its relevance to both U.S. and Chinese policymakers. The presentation of the initial findings to a global audience in Beijing on May 25th 2024 was a key milestone, offering constructive feedback that further enhanced the study's impact. This collaboration provided the strength to the project's commitment to producing meaningful research with global significance.

Overview

Chinese graduate students educated in the United States are increasingly returning to China, as many perceive greater opportunities there compared to the U.S. According to Statista, during the 2022/23 academic year, 289,526 students from China were studying in the U.S. Concurrently, approximately 60% of all Chinese students in the U.S. were expected to return home (He, 2020).

This study examines the decision-making process that influences whether Chinese graduate students choose to remain in the United States or return to China after completing their studies. Based on 1,252 survey responses collected by Multicultural Insights in early 2024, the analysis identifies a range of factors that contribute to these decisions, demographic characteristics, including educational experiences, motivational elements, social integration, and external influences such as media consumption and government policies. Understanding these factors is crucial for policymakers and educational institutions to develop strategies that support international students and optimize their contributions to both countries.

This study distinguishes itself from previous research in several keyways. First, it is one of the largest surveys conducted since the onset of the global pandemic, featuring a larger sample size compared to many earlier studies. Additionally, it doesn't focus exclusively on STEM students but includes samples of graduate students who study social sciences. The survey was conducted during a period of declining Chinese student enrollment in the U.S., adding a timely and relevant dimension to the findings. Furthermore, the study was conducted in close collaboration with the Center for China and Globalization (CCG), with whom MI consulted on the research questions and survey construction. This partnership ensured that the study addressed issues of relevance to policymakers in both China and the United States, enhancing its practical applicability.

The report begins with an Introduction and Literature Review, summarizing the last decade of research on Chinese graduate students in the United States. The Methodology section details the study design, sampling logic, survey administration process, and statistical analyses. The Results section starts with the demographic characteristics of the sample and includes statistical comparisons based on these characteristics. Descriptive statistics for each survey section are then presented, with formal statistical testing results provided where significant differences were found. Additionally, each subsection of the Results includes a predictive model using section variables to forecast the likelihood of returning to China versus remaining in the U.S.

A distinctive aspect of this report is its exclusive focus on graduate students. It is anticipated that the insights provided will be valuable for policymakers, aiding them in understanding and addressing the factors influencing Chinese graduate students' post-graduation decisions.

Selected Results

Students pursuing education in the U.S. often plan to stay post-graduation, drawn by advanced research facilities, academic mentorship, and professional opportunities. These students view the U.S. as offering unparalleled chances for growth and development. Conversely, students whose families prioritize education for improved prospects back home are more likely to plan to return to China, using their international experience to enhance their social status and contribute to China's development.

Living abroad and access to cutting-edge technology are significant motivators for students to plan to stay in the U.S., with those valuing a cosmopolitan lifestyle or advanced technological opportunities more likely to plan to remain. However, experiences of discrimination and alienation can prompt students to plan to return to China, as negative social environments undermine their sense of belonging. Media consumption also shapes these decisions, with American media correlating with students' plans to stay and Chinese media associating with the plans to return.

Family dynamics, like being an only child, and academic factors, such as degree type and university ranking, also influence post-graduation plans, with some students torn between obligations at home and career aspirations abroad.

Respondents' Profiles Based on Desire to Remain in the U.S. or Return to China

Plan to Remain in the U.S.: Chinese graduate students pursuing studies in the United States often intend to secure Optional Practical Training (OPT) upon graduation, followed by an H-1B visa, and ultimately aims to obtain permanent residency and citizenship. Such students' desire to remain in the U.S. is generally motivated by favorable economic conditions, promising career opportunities, and the political stability of the United States. Conversely, they may feel disillusioned by high housing costs, environmental degradation, and stringent residential regulations in China.

Students inclined to remain in the U.S. after their studies often engage in extensive travel within the state where they are studying as well as other regions of the country. They tend to cultivate a broad social network, which includes both American nationals and international students. If religious, these students typically attend non-Chinese places of worship and actively participate in student-led organizations, social gatherings, and field trips, which are not coordinated by the Chinese Students and Scholars Association (CSSA). Moreover, they are more likely to volunteer both on campus and within the local community, and they frequently partake in the celebration of American holidays.

EXECUTIVE SUMMARY

Plan to Return to China: Graduate students who are more inclined to return to China may plan to spend some time in the United States working under OPT or possibly an H-1B visa to gain experience, their primary motivation lies in remaining close to family and capitalizing on the economic prospects of China. This individual tends to maintain a strong social network within China and often holds a favorable view of the one-party system and is expressing skepticism towards American democracy.

Such students are more likely to rely on Chinese media sources for information while studying in the United States, and their social circles predominantly consist of other Chinese nationals. These students often encounter discrimination, both on and off campus, which may include being unfairly accused of academic dishonesty or even espionage on behalf of China. Their experiences of bias and marginalization further reinforce their desire to return to China.

This inclination to return would be strengthened if China were to offer financial support for returning talent, as well as assistance with relocation and support for their families. These students often perceive that remaining in the United States would be challenging due to their Chinese nationality and feel more comfortable working in their native cultural and social environments. Additionally, they are less likely to travel extensively within the U.S. and tend to participate more in events organized by the CSSA.

Undecided: Students who are more likely to experience hesitation regarding whether to remain in the United States or return to China are often only children, which further complicates the decision-making process. While indecisive, students ideally lean towards staying in the U.S.; however, they feel more at ease working within their native environment and communicating in their native language. Concerns about potential discrimination in the U.S. due to their accent or appearance, as well as the perceived difficulties of remaining in the country as a Chinese national, contribute to their uncertainty.

These students are particularly interested in working for major Chinese technology companies. Simultaneously, they recognize that remaining in the U.S. could present more entrepreneurial opportunities. Their views on American democracy are generally positive, and they are likely to consume information from both Chinese and American media sources.

Students in this category tend to engage in travel within the U.S., participate in campus events, and celebrate both American and Chinese holidays. Their decision to return to China would be strongly influenced by favorable policies from the Chinese government, particularly if financial support were offered to returning talent and their families, and if restrictions on residency were relaxed.

Recommendation

To retain talented international graduates, particularly those from top-tier institutions, the U.S. should streamline pathways to permanent residency and citizenship by expanding H-1B visa access and easing the transition to green cards. Enhancing career opportunities through job placement programs, particularly in STEM fields, and fostering partnerships between universities and industries would make staying in the U.S. more attractive. Additionally, addressing discrimination and fostering social integration through inclusive student organizations, cultural events, and affordable housing initiatives could help international students feel more secure and welcomed, encouraging them to remain in the country.

China, on the other hand, can attract returning graduates by offering substantial financial support such as grants, subsidies, and competitive salaries. Promoting career development in high-growth sectors like technology and artificial intelligence, while relaxing residency restrictions, particularly in major cities, would remove barriers to returning. Additionally, strengthening global market access and providing entrepreneurial support programs, such as start-up funding and tax incentives, would offer returning graduates opportunities for meaningful careers and innovation, making China a more appealing option for talented individuals.

PART I: INTRODUCTION

Graduate students play a critical role in driving a nation's capacity for innovation, scientific development, and economic growth (Chellaraj et al., 2008; Bastalich, 2010). As the primary force behind academic research and development, they contribute to advancing knowledge in various fields, including science, technology, and social sciences (Bozic & Dunlap, 2013). Their work often leads to groundbreaking discoveries and technological advancements that can significantly influence a country's global competitiveness (Zhang, 2024). According to a study by the Wawrzynski & Baldwin (2014) graduate students are instrumental in conducting high-impact research that propels industries forward, thus fostering economic growth. Their contributions are not just limited to academia; they also enter the workforce with advanced skills and knowledge, thereby enhancing the innovation capabilities of the industries they join (Abuzyarova et al., 2019). A study by Hyun (2019) highlights how international graduate students play a crucial role in promoting cultural diversity within academic institutions, which, in turn, strengthens social cohesion and enriches the cultural fabric of the host country.

Over the past two decades, Chinese graduate students have been an integral part of the academic landscape in the United States, particularly in science, technology, engineering, and mathematics (STEM) fields. These students have significantly contributed to the research output of American universities, often excelling in scientific productivity compared to their peers (Barnes, 2007; Gaule & Piacentini, 2013). The U.S. has been an attractive destination due to the high quality of education, access to cutting-edge research facilities, and opportunities for collaboration with leading scholars.

The presence of Chinese graduate students has also been instrumental in enhancing the diversity of thought and innovation in U.S. research institutions (Gaule & Piancentini, 2015; Han, Xu, Xiao, & Liu, 2024) as well as in fostering cultural diversity and encouraging a vibrant exchange of ideas that benefits the broader academic and professional communities (Zhang, 2016; Wang & Freed, 2021). Moreover, graduate students enrich a nation's cultural diversity, contributing to a more inclusive and dynamic society (Paige, 1990; Owens, Srivastava, & Feerasta, 2011; Banks, 2015).

Chinese students have long been a significant contributor to the U.S. economy, particularly through their preference to remain in the country after completing their studies (Welch & Chen, 2008). Historically, a substantial number of Chinese graduates have opted to stay in the United States, taking up employment in various sectors such as technology, engineering, and finance (Yan & Berliner, 2016). This trend has provided a steady stream of highly skilled professionals who contribute to the American workforce and economy. According to the Institute of International Education (2020), Chinese students make up the largest group of international students in the U.S., and their presence has a direct impact on economic growth through tuition fees, living expenses, and their contributions to the labor market.

However, in recent years, there has been a noticeable shift in this trend, with more Chinese students choosing to return to their homeland after completing their education (Cheung & Xu, 2015; Gu & Schweisfurth, 2017; Singh, 2020). This reverse migration is largely driven by China's rapid economic development and the increasing opportunities available within the country (Mok et al, 2022). As China's economy continues to grow and diversify, the demand for highly educated and skilled professionals has surged, creating a strong pull for Chinese graduates to return (Zhang, Zeng, & Zhang, 2022). The Chinese government has also implemented policies to encourage the return of its overseas talent, recognizing their potential to contribute to the nation's innovation and economic growth. A report by the Center for China and Globalization (2019) highlights that the return of these graduates is critical for sustaining China's economic momentum and technological advancements.

The return of Chinese graduates to their homeland is not only important for China's economic potential but also for its long-term development strategy (Wu & Shao, 2014). These returnees bring with them advanced knowledge, skills, and international experience, which are essential for driving innovation and competitiveness in the global market (Gu & Schweisfurth, 2017). By reintegrating into China's rapidly evolving economy, they play a crucial role in fostering entrepreneurship, enhancing research and development, and contributing to the overall modernization of the country (Wang, 2023). As noted by the World Bank (2021), the successful reintegration of these highly skilled professionals is vital for China's aspirations to become a global leader in technology and innovation, further solidifying its position as a major economic power. Additionally, the networks and relationships these graduates establish in the U.S. facilitate bilateral cooperation in research and business, strengthening ties between the two countries. As such, Chinese graduate students in the U.S. serve as key contributors to economic growth and cross-cultural understanding, playing an essential role in shaping the future of Sino-American relations (Fischer, 2022).

The recent years have been marked by an increase in the number of Chinese students opting to return to China after completing their graduate studies in the United States (Wang, 2023). According to the China Statistical Bureau, the return rate of Chinese international students from countries outside of China has risen dramatically from 14% in 2002 to an impressive 82% in 2019 (Ma & Zhang, 2022). Furthermore, according to Statista (2024) in the last few years, the number of Chinese students who studied abroad and came back to China kept growing, most recently at a rate of 11.7 percent. In 2019, around 580.3 thousand Chinese students returned back to their home country, increased from 135 thousand students in 2010.

2.1 Motivation for Chinese Students to Study Abroad

2.1.1. Quality of Education

The superior quality of education in the United States is a considerable pull factor (Choi, 2021). American universities are renowned for their advanced research facilities, diverse academic programs, and innovative teaching methods. The U.S. institutions offer opportunities to study under globally recognized scholars and engage in cutting-edge research, which is highly attractive to Chinese students. Li and Stodolska (2006) emphasize that Chinese students are particularly drawn to the U.S. education system because it focuses on character and social skills development, areas they believe are lacking in the Chinese education system. The emphasis on critical thinking and creativity in U.S. institutions contrasts sharply with the rote learning methods prevalent in China (Sheng, 2020).

2.1.2. Personal and Professional Development

The opportunity for personal and professional development is another crucial factor motivating Chinese students to study abroad. Education in the United States is perceived as a way to develop critical thinking, creativity, and independent learning skills, which are less emphasized in the Chinese education system (Huang, 2012). Furthermore, studying abroad provides a platform for building a global professional network and enhancing intercultural competence. This international exposure is seen as valuable for personal growth and future career opportunities. Mau and Jepsen (1988) found that Chinese students view studying in the U.S. as a means to gain new perspectives on their own country and develop skills that are highly valued in the global job market.

2.1.3. Social and Cultural Factors

Social and cultural motivations also play a substantial role in the decision to study abroad (Austin & Shen, 2016). The prestige associated with earning a degree from Western institutions, which is often viewed as a pathway to better career opportunities, and the desire for exposure to a more diverse and innovative educational environment drives many students to pursue studies abroad (Cheng, Lin, & Fan, 2020). Additionally, family expectations and the aspiration to gain social prestige by obtaining a degree from a prestigious foreign university cannot be underestimated. Huang (2012) highlights that many Chinese families view education in the United States as a symbol of success and a way to elevate their social status.

2.1.4. Educational System Constraints in China

The constraints within the Chinese education system considerably contribute to the decision to pursue education abroad (Hegarty et al., 2013).

High competition for university places, rote learning methods, and a perceived lack of academic freedom drive students to seek education in more flexible and innovative environments. Li and Stodolska (2006) point out that the Gaokao, China's national college entrance examination, is highly competitive and stressful, prompting many students to look for alternatives abroad. The Chinese education system's focus on memorization and exam preparation often leaves students feeling unprepared for the higher-order thinking skills required in Western educational contexts (Sheng, 2020).

2.1.5. Opportunities for Immigration

The prospect of immigration is another motivating factor (Chao, 2016). Many Chinese students view education in the United States as a pathway to potential permanent residency or employment opportunities in a country with a perceived better quality of life and more career opportunities. Zweig & Kang (2022) highlight that the possibility of staying abroad post-graduation for work experience is a substantial consideration for many students and their families.

2.2. Students' Attitudes Towards American Democracy and American Education

2.2.1 Attitudes Towards American Democracy

Chinese graduate students in the U.S. often arrive with preconceived notions of American democracy and political systems, influenced by their upbringing in a different political environment (Wilson, 2016; Hail, 2015). Upon exposure to the U.S. political system, these students' perspectives are subject to change, shaped by direct interactions with democratic processes and the ideological diversity they encounter. According to a study by Wang and Holland (2011), Chinese students generally appreciate the principles of freedom and democracy espoused in American political ideology. However, their admiration is often tempered by a pragmatic view of political efficacy and skepticism about the implementation of democratic ideals in practice. Studies have shown that while many Chinese graduate students respect the theoretical foundations of American democracy, they often express concerns about its practical shortcomings. For instance, a survey by Zhang (2016) revealed that while students admire the concept of free speech, they are sometimes disillusioned by the extent of partisan conflict and the influence of money in politics.

The educational environment plays a critical role in shaping these attitudes. Research by Cai (2014) suggests that Chinese students in social science and humanities programs are more likely to engage critically with American political structures, leading to a better understanding and sometimes a critique of both American and Chinese systems. These students often appreciate the transparency and accountability mechanisms in American democracy but are also critical of perceived inefficiencies and political polarization.

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Personal experiences and interactions with American society further influence students' views. Luo and Jamieson-Drake (2013) found that Chinese students who participate in civic activities, such as voting for university government or attending political rallies, tend to develop a more favorable view of American democracy. Conversely, those who face discrimination or feel marginalized may harbor negative perceptions about the host country (Yang, He, & Xia, 2022).

2.2.2. Attitudes Towards American Education

Chinese students tend to view the American education system as offering valuable opportunities for personal and academic growth (Ma & Yang, 2022). The American education system is often praised for its emphasis on critical thinking, creativity, and independent research. Studies, such as those by Zhang and Goodson (2011), indicate that Chinese students appreciate the student-centered approach and the encouragement to question and debate ideas. On the other hand, many students also express challenges in adapting to the open classroom discussions, the expectation for self-initiative, and the high degree of student-professor interaction, which differ significantly from their experiences in Chinese institutions (Smith, 2020). Moreover, the different pedagogical approaches can sometimes lead to frustration and confusion, particularly when Chinese students feel unprepared for the level of independence expected in American universities (Huang, 2012; Rawlings & Sue, 2013).

Despite these positive perceptions, Chinese graduate students also encounter several challenges in adapting to the American educational environment. Wang (2016) notes that language barriers, cultural differences, and different academic expectations can create initial difficulties. The emphasis on participation and open discussion in U.S. classrooms can be daunting for students accustomed to more passive learning styles (Henning, 2007; O'Connor et al., 2017).

Comparing American and Chinese education, Chinese graduate students often recognize the strengths and weaknesses of both systems. A study by Tian and Low (2009) highlights that while Chinese students value the rigorous training and strong foundational knowledge provided by Chinese education, they also criticize its lack of flexibility and innovation. On the other hand, while they appreciate the freedom and encouragement to explore diverse interests in American education, they may critique it for perceived lack of structure and rigor in certain aspects.

Personal and professional outcomes also influence these attitudes. Those who perceive their U.S. education as advantageous for their career prospects tend to have a more favorable view of the American education system. Conversely, students who struggle academically or socially may view the American system less favorably, often comparing it unfavorably to the familiarity and support systems of the Chinese educational context. For example, Xu (2018) found that students in STEM fields often find the hands-on research experience invaluable, which they feel is less emphasized in China.

2.3. Information Sources for Chinese Graduate Students in the United States

2.3.1. Influence of Information Sources

Information sources play a critical role in shaping the decision-making process for Chinese graduate students who choose to study in the United States. These sources, which include both formal and informal channels, significantly influence their perceptions of the U.S., American higher education and its opportunities (Rafi, 2018; Zhao, Zhou, & Huang, 2008). Formal sources, such as university websites, official rankings, and educational fairs, provide students with structured and authoritative insights into academic programs, institutional reputations, and potential career prospects. In contrast, informal sources, such as social media, online forums, and peer networks, offer a more personalized and experience-based perspective, often reflecting the lived experiences of current or former students (Chow et al, 1999). Additionally, Chinese students often rely on familial advice and media portravals of the United States, which can reinforce or challenge their perceptions of the academic and cultural environment abroad. These diverse information channels collectively shape students' expectations. motivations, and ultimate decisions regarding studying in the United States (Porta, 2017).

2.3.2. Reliance on Chinese Sources While in the U.S.

China's online information environment is much distinct from the one of the United States (Wenfang, Yang, & Martin, 2017). Chinese graduate students in the United States navigate a complex landscape of news and information sources to stay informed about both domestic and international events. Being bilingual, Chinese graduate students are exposed to a range of perspective from their previous (Chinese) and current (American) online environment (Zhang, 2016). Thus, Chinese students studying in the U.S. rely heavily on both Chinese and American media outlets for news. Mainland Chinese students often continue to access censored information sources from their home country even while abroad, which allows for the influence of established media habits and the persistent trust in familiar sources (Yang, Wu, Zhu, Brian, & Southwell, 2004). Additionally, Zhang (2016) focuses on the transition experiences of Chinese doctoral students, noting that the availability and accessibility of familiar media sources play a pivotal role in their adjustment process.

Dependency on media shapes how these students process and respond to information (DeFleur and Ball-Rekeach. 1989). The reliance on Chinese media provides a sense of connection and reassurance amidst the uncertainties of living abroad. Conversely, the integration of American media sources allows them to better navigate their immediate environment, stay informed about local developments, and critically evaluate different narratives. Yet, the media consumption habits of Chinese students in the U.S. are not static but dynamically adapted to meet their informational needs and situational demands.

2.4. Factors Influencing Decision-Making Process

2.4.1. Economic Factors

The dynamic economic environment in China now offers competitive salaries and ample career opportunities, particularly in technology, finance, and academia. Furthermore, the Chinese government has implemented various financial incentives to attract returnees, such as funding, grants, and housing benefits, which have proven effective in reversing the brain drain (Cao, 2008).

The relative economic stability and the government's investment in innovation and infrastructure provide a secure environment for career development. This stability is particularly appealing in contrast to the perceived uncertainties of the U.S. job market, exacerbated by fluctuating visa policies and economic conditions (Li, 2023).

Conversely, a higher earning potential in the United States attract many Chinese graduates (Li, Shen, & Xie, 2021). The potential for higher earnings is a significant motivator. Research by Hanson & Slaughter (2016) indicates that salaries in the U.S. for certain high-demand fields, such as technology and finance, are substantially higher than those in China, making the U.S. an attractive destination for career advancement.

The presence of leading global companies, higher salaries, and the potential for professional growth in sectors such as research and development make staying in the U.S. an attractive option. The advanced infrastructure and innovationdriven environment in the U.S. provide ample opportunities for career advancement and professional fulfillment (Zhu, Liu, Lin, & Liang, 2022). Compared to China, the U.S. offers a more mature, robust ecosystem for research and innovation, supported by significant investments in higher education and cutting-edge technology. This environment fosters collaboration, creativity, and professional development, appealing to graduates seeking to work at the forefront of their fields. Additionally, the diverse and multicultural nature of the U.S. workforce provides a unique professional experience that can be highly rewarding both personally and professionally.

2.4.2. Social, Cultural, and Family Factors

Social and cultural factors also play a crucial role in this decision-making process. Family ties and the desire to be close to family members often influence students to return to China (Kline & Liu, 2005). The cultural familiarity and comfort of returning to one's home country can outweigh the benefits of staying abroad, especially when considering long-term personal and family goals. Moreover, the challenge of adapting to the U.S. culture and lifestyle can be formidable for many students (Gu & Schweisfurth, 2015). Issues such as language barriers, social integration, and cultural differences often make the prospect of staying in the United States less appealing. The support systems and cultural familiarity in China can offer a more comfortable and supportive environment for returnees (Wang, 2014).

Social networks established in China also play a decisive role. These networks provide emotional support and job opportunities that might not be as accessible in the United States. The strong social ties built during their early lives in China can be a compelling reason for students to return, as they offer a sense of belonging and security that can be difficult to replicate in a foreign country (Wang, 2014). The value of "guanxi," or personal connections, cannot be underestimated in the Chinese context, as it often facilitates business dealings and career advancements (Luo, 2007). Returnees can leverage these networks to access highquality job opportunities, mentorship, and business partnerships, which might not be as readily available to them in the U.S. Furthermore, these networks often extend to professional organizations and alumni associations that can provide additional resources and support for career development (Chen, Chen, & Huang, 2013; Bian, 2019).

Family reunification is another crucial factor influencing the decision to return. Many Chinese students feel a strong sense of duty to care for aging parents and reconnect with family members. In Chinese culture, family obligations often outweigh professional considerations. This cultural norm creates a significant pull factor for students who prioritize familial responsibilities over career advancement opportunities abroad (Hao & Welch, 2012). Moreover, the collectivistic nature of Chinese society places a high value on familial harmony and intergenerational support, which reinforces the importance of returning home. Emotional bonds and the sense of filial piety can drive students to forego lucrative career opportunities in favor of fulfilling their roles within the family unit. This dynamic can be particularly strong among those who are only children, a common scenario due to the one-child policy that was in place for decades.

Furthermore, the comfort of working in a familiar cultural and linguistic environment cannot be underestimated. Huang (2012) highlights that many Chinese students feel more at ease and perform better professionally when they are in their native language and cultural context. This comfort can lead to better job satisfaction and performance, which are critical factors in career decision-making.

2.4.3. Political Factors

Political and legal factors further complicate the decision for many Chinese graduate students. Stringent U.S. immigration policies have made it increasingly difficult for Chinese students to secure long-term visas and work permits (Mackie, 2023). These restrictions have prompted many students to reconsider their plans and return to China. The uncertainty of the H-1B visa lottery system and long waiting periods for green cards create significant barriers, making it difficult for students to secure a long-term future in the U.S. (Dixon-Luinenburg. 2022). Additionally. changes in immigration policies and enforcement can create a sense of instability and insecurity. This environment of legal and administrative hurdles can discourage students from committing to long-term career plans in the U.S., pushing them to consider returning to China.

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The relatively stable political environment in China ensures consistent economic policies, which can be appealing for students looking for a secure and predictable professional landscape (Li, 2009). The central government's ability to implement long-term strategic plans without the interruptions caused by political shifts can provide a sense of continuity and reliability that is appealing to students planning their Additionally, state-backed enterprises careers. and government-related research institutions often offer stable and well-compensated positions, providing further incentives for returnees seeking job security and career advancement in a stable political environment (Cao, Simon, & Appelbaum, 2018).

Further, the geopolitical tensions between the U.S. and China have created an atmosphere of uncertainty and instability, making the prospect of staying in the United States less attractive. These political dynamics, coupled with the attractive opportunities and supportive policies in China, significantly influence the decision-making process of Chinese graduate students (Shen, Wang, & Jin, 2021; Chen & Xu, 2021).

On the other hand, the strict household registration (Hukou) [1] restrictions in China can pose challenges for returnees, especially those who want to live and work in top-tier cities like Beijing and Shanghai (Song, 2014). However, recent reforms have aimed to make it easier for highly educated returnees to obtain urban Hukou, thereby mitigating some of the difficulties associated with the system (Chan & Buckingham, 2008). These measures are part of broader efforts to attract and retain talent in major urban centers, where their skills are most needed.

2.4.4. Other Factors

The COVID-19 pandemic disrupted global mobility and economic conditions, leading many Chinese students to opt for returning home due to uncertainties in the U.S. job market and the relative safety and stability in China (Yang & Shen, 2022). During this period, China's substantial investment in research and development, coupled with the establishment of world-class universities and research institutions, has made it an increasingly competitive destination for returning scholars. This shift in the perception of opportunities in China has further driven the trend of increased return rates (Hao & Welch, 2012).

Poor environmental conditions in China, such as air pollution, are notable deterrents for returning students. Despite the economic growth, environmental degradation remains a critical issue in many Chinese cities. This factor and associated health risks can dissuade students who are accustomed to the relatively better environmental conditions in the United States (Zhang et al., 2021). Efforts by the Chinese government to address these issues, such as implementing stricter environmental regulations and investing in green technologies, are ongoing.

Additionally, many Chinese students have invested considerable time and effort into mastering English, and working in an English-speaking country allows them to utilize and further develop this skill. Moreover, the professional culture in the U.S., which often emphasizes innovation, individuality, and professional growth, is appealing to many Chinese graduates (Huang, 2005).

Finally, the cultural diversity and the inclusive nature of many American workplaces provide a stimulating environment for Chinese graduates seeking new experiences and challenges (Chen, 2024).

The implications of the change in the numbers of Chinese graduate students deciding to remain in the U.S. are profound for both the United States and China. For the U.S., the potential loss of highly skilled talent could impact innovation and research capabilities. Universities and industries that rely heavily on international talent may face significant challenges in maintaining their competitive edge. Conversely, for China, the return of highly educated and skilled individuals considerably contributes to the country's human capital and economic development. Returnees bring valuable international experience and knowledge, which can drive innovation and growth in various sectors (Kellogg, 2012; Liu, 2015).

2.5 Strategic Initiatives and Policies to Facilitate Return of Chinese Talent to China

In the past decade, China has made substantial strides in reversing the "talent mobility" trend and attracting highly skilled Chinese professionals back to the country (Li, 2023). This trend has been driven by the government's strategic initiatives and policies designed to encourage the return of Chinese talents from abroad. The measures implemented encompass a range of incentives and support mechanisms, targeting various aspects of professional and personal life to make returning to China an attractive proposition for these professionals. China's efforts to attract talents back home are anchored in several key initiatives and policies, which have been crafted and executed to address the needs and expectations of returnees. The primary programs include the "Thousand Talents Plan" (千人计划), the "Thousand Young Talents Plan" (青年千人计划), and the "Ten Thousand Talents Program" (万人计划).

Launched in 2008, the Thousand Talents Plan aims to bring leading scientists and engineers of Chinese origin, especially those with overseas experience, to China. This program offers substantial financial incentives, including research grants and competitive salaries, alongside other benefits such as housing allowances and startup funds for research. These measures are designed to create a conducive environment for scientific research and innovation (Zweig, Kang, & Wang, 2013).

[1] The Hukou system, which traditionally tied individuals to their place of birth and limited their access to public services and benefits in other regions, has been a significant barrier to internal mobility. Reforms targeting highly skilled professionals have included incentives such as expedited Hukou processing and access to housing subsidies, making the transition back to China more appealing for returnees

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In response to the need for younger talents, the Thousand Young Talents Plan was introduced. This program specifically targets young professionals under the age of 40, offering them similar financial and professional support as the original Thousand Talents Plan. The focus here is on fostering the next generation of scientists and technologists, ensuring that China remains at the forefront of global innovation (Lewis, 2023).

Complementing the Thousand Talents Plan, the Ten Thousand Talents Program aims to create a broader talent pool by targeting a larger number of professionals. This initiative provides a more inclusive approach, catering to a wide range of expertise and encouraging the development of high-caliber professionals across various sectors. The program supports talents in academia, industry, and government, promoting interdisciplinary and cross-sectoral collaboration (Jia, 2018).

China's strategy to attract returning talents extends beyond financial incentives. A comprehensive support system has been developed to address the personal and professional needs of returnees, ensuring a smooth transition and integration into Chinese society. Returnees are offered various professional development opportunities, including preferential policies for research funding, access to state-ofthe-art laboratories, and opportunities for collaboration with leading Chinese institutions and enterprises. Additionally, returnees are often given prominent positions in academia and industry, allowing them to influence and shape their respective fields (Zweig et al., 2013).

Recognizing the importance of personal well-being and family considerations, China provides a range of support services to ease the transition for returning talents. These include housing subsidies, education opportunities for children, and healthcare benefits. Efforts are made to ensure that the families of returnees are well-integrated into the local community, thereby creating a supportive and welcoming environment (Jia, 2018).

The measures implemented by China have yielded significant results. According to the Ministry of Education, the number of returning Chinese talents has been steadily increasing, with over 800,000 returnees in 2019 alone (Zwetsloot, 2020). This influx of highly skilled professionals has contributed to the growth of China's innovation ecosystem, enhancing the country's competitive edge in the global market.

Determined to reverse the loss of top talent that has occurred since opening up to the global community over the past three decades, China is leveraging its substantial financial resources and a sense of national pride to attract scientists and scholars back home (Li, 2023; Zweig et al., 2013). While the West, particularly the United States, remains an appealing destination for many Chinese scholars to pursue their studies and research, China's investment in research and development has been steadily increasing over the past decade, reaching 2.4 percent of its gross domestic product (World Bank Group, 2021). Although the United States allocates 3.5 percent of its GDP to research and development, China's proportion surpasses that of most other developing nations (NSF, 2024).

PART III: METHODOLOGY

3.1. Overview

Multicultural Insights (MI) performed an extensive investigation aimed at studying the attitudes of Chinese graduate students currently pursuing their education in the United States towards either returning to China postgraduation or remaining in the United States. An online survey was selected as the methodological approach for this study due to its relative efficiency and simplicity in data collection, and reasonable cost.

The survey consists of 47 questions spanning multiple domains, designed to capture a comprehensive view of the participants' experiences and perspectives. The survey specifically addresses the students' post-graduation intentions—whether to stay in the U.S. or return to China—thereby providing crucial insights into the push and pull factors influencing such decisions. It investigates the reasons behind their choice to study in the U.S., exploring elements such as the allure of the American educational system, the quality of research facilities, and the opportunities for professional development.

The perception of economic factors, such as job opportunities and salary prospects in both countries, were scrutinized to understand their impact on the students' future plans. Additionally, the impact of political factors was examined, with the survey exploring how immigration policies, bilateral relations between the U.S. and China, and immigration policies influence their decisions. The investigation also considered cultural and social networks, including the presence of supportive communities and the role of cultural assimilation, to assess their effect on the students' well-being and integration into U.S. society.

Demographic information, including age, gender, field of study, and educational background, were collected to identify trends and patterns that could inform targeted policies and programs. Through this survey, MI aims to interpret the motivations and challenges faced by Chinese graduate students in the U.S., offering evidence-based recommendations to policymakers, educators, and students alike.

3.2. Focus Groups

Prior to the construction of the survey, MI conducted two focus groups with Chinese graduate students currently studying in the United States. These focus groups were essential in identifying the key issues and concerns specific to this demographic, ensuring that our survey instrument would be relevant and comprehensive (Krueger & Casey, 2015). Engaging students in these discussions allowed MI to gain direct insights into their unique experiences and perspectives, thereby informing the topics and questions included in the survey. This preliminary qualitative research helped MI to refine the survey questions, addressing any ambiguities and cultural nuances, and ensuring that the questions were clear and interpreted consistently by all respondents (Morgan, 1996). An innovative methodology was employed to recruit students for the focus groups. Utilizing customized Python code, we designed web scraping procedures to systematically crawl major university websites for lists of published names and email addresses of graduate students. A classifying algorithm was then developed and trained to recognize Chinese names based on Pinyin spelling rules, achieving an accuracy rate of 98%. Emails encouraging students to participate in the focus groups were sent individually to randomly selected students from the generated list.

Two focus groups, each comprising eight participants each, were conducted in late December 2023 and early January 2024. These sessions were held online via Zoom and were recorded. To ensure the validity of responses and guarantee anonymity, participants were given the option to conceal their faces and use pseudonyms before recording commenced. Each focus group session lasted for one and a half hours, allowing for an in-depth exploration of the participants' perspectives. Focus group participants received a USD 100 Amazon gift card for their time.

3.3. Survey Design

The construction of the survey aimed at Chinese graduate students studying in the United States involved a thorough process to ensure comprehensive coverage of relevant aspects of their academic and non-academic lives. The survey was designed to take 20 minutes to respond.

To accurately capture the experiences and perspectives of Chinese graduate students, the survey was structured into multiple modules (domains). These modules included the following topics: intentions to stay in the U.S. versus returning to China, reasons for studying in the U.S., academic comparisons between U.S. and China, economic factors, political experiences, cultural and social networks, and questions regarding awareness of support programs in China.

The survey also incorporated a demographic section to collect essential background information, including age, gender, length of stay in the U.S., highest level of education completed, current degree pursued, marital status, household income, parental education levels, and financial support received.

3.4 Cognitive Testing and Pilot

To ensure the effectiveness and clarity of the survey, MI conducted cognitive testing followed by a pilot test. Cognitive testing involved administering the survey to a small sample of Chinese graduate students and conducting in-depth interviews to understand their thought processes while answering the questions. Cognitive testing was a crucial step in survey development, as it ensured that questions are interpreted as intended by the respondents, thus enhancing the validity and reliability of the survey instrument (Willis, 2005).

PART III: METHODOLOGY

Following the cognitive tests, MI carried out a pilot test with 18 volunteers to further evaluate the survey's performance in a real-world setting. The pilot test aimed to assess the feasibility of the survey, the appropriateness of the questions, and the overall data collection process. It also provided an opportunity to test the survey's administration logistics, skip patterns, and the data analysis procedures. Insights gained from the cognitive testing and pilot test were used to make final adjustments to the survey, ensuring that it was both comprehensive and user-friendly. The pilot testing phase was essential in refining the survey instrument, as it helped in identifying and rectifying any remaining issues before the fullscale data collection begins (Presser et al., 2004).

3.5. Data Collection and Survey-related Statistics

Data collection for the survey was conducted using Survey Monkey, spanning from February 1 to April 1, 2024. The primary recruiting method involved the use of a generated email list, which allowed MI to personally target Chinese graduate students from this list. The generated email list was created using customized Python code designed to perform web scraping on major university websites, extracting publicly available names and email addresses of graduate students. A classifying algorithm, trained to recognize Chinese names based on Pinyin spelling rules with 98% accuracy, was employed to ensure the list specifically targeted Chinese graduate students. To augment this, MI also leveraged popular social platforms such as WeChat, Telegram, and Facebook to further target Chinese students studying in the United States. This multi-channel approach helped in reaching a diverse and representative sample of the Chinese student population, ensuring the collection of robust data.

Screener questions were incorporated into the survey to filter out responses from non-Chinese students and undergraduate students, thereby focusing solely on the intended demographic. This filtering process was critical in maintaining the integrity and relevance of the data collected. Throughout the data collection period, MI was able to gather 1,252 full responses. The survey achieved a response rate of 63%, indicating a strong level of engagement and interest from the target population.

The collected data was subject to rigorous statistical analysis to ensure its validity and reliability. With a margin of sampling error of +/- 3% at the 95% confidence level, the findings from this survey can be considered reflective of the broader population of Chinese graduate students in the U.S. The careful planning and execution of the data collection process allowed MI to compile a comprehensive dataset, providing valuable insights into the experiences, motivations, and future intentions of Chinese graduate students studying in the United States.

4.1. Demographics

4.1.1. Age

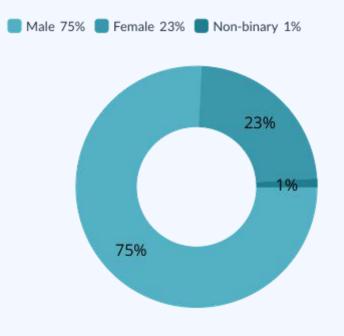
The average age of Chinese graduate students in studying in the United States was 26 (M = 26.1, SD = 2.6). The age of participants ranged from 22 to 33 years old. When disaggregated by gender, the average age for men was 26 (M = 26.1, SD = 2.7) and 27 for women (M = 26.6, SD = 2.3). The difference was not statistically significant.

4.1.2. Gender

The survey reveals that a substantial majority of the participants, 75%, are male. Female participants constitute 23% of the surveyed population. A very small segment, 1%, of the participants self-identified as non-binary participants.

Historically, male Chinese students have outnumbered female students. The gender gap is particularly pronounced in Science, Technology, Engineering, and Mathematics (STEM) fields. According to the National Science Foundation (NSF), in 2019, women made up only about 25% of the graduate students in engineering and 31% in physical sciences (NSF, 2021). This trend is especially evident among international students including those from China (UNESCO, 2017).

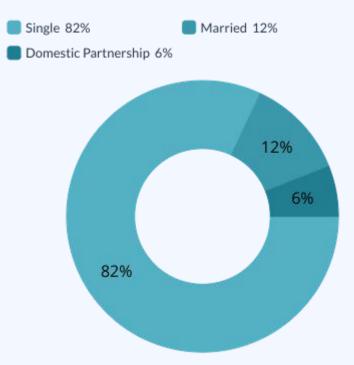
Figure 4.1.1.: Participants' Gender



4.1.3. Marital Status

Most of the participants, 82%, are single. Married participants constitute 12% of the surveyed population, while those in domestic partnerships make up 6%.

Figure 4.1.2.: Marital Status



4.1.4. Household Income

The analysis revealed that 45% of the respondents have an annual income between \$0 and \$20,000. Approximately 32% of the participants have an annual income ranging from \$20,000 to \$40,000, suggesting that a high portion of the students might be receiving stipends, working part-time, or receiving financial support. Much less, 15%, of the students fall into the \$40,000 to \$60,000 income bracket. Only 3% of the surveyed students have an income of or exceeding \$60,000. Additionally, 5% of the participants indicated that they do not know their income.

Figure 4.1.3.: What is your annual household income in the U.S., before taxes? Please include income from salaries, stipends, remittances from family living outside of the US, and/or other sources.



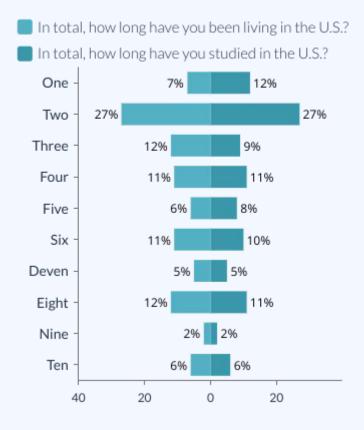
4.1.5. Duration of Stay

The data show that a large portion of respondents, 27%, have been living in the U.S. for two years. Twelve percent of students have been residents for three years, and the same percentage applies to those who have been in the U.S. for eight years. Eleven percent of students reported living in the U.S. for four and six years each. Smaller percentages of students have been in the U.S. for one year (7%), five years (6%), seven years (5%), nine years (2%), and ten years (6%).

When looking at the length of time these students have been studying in the U.S., the pattern is quite similar. Again, 27% of the students have been studying for two years, which is the most common duration, mirroring their residency period. Twelve percent have been studying for one year, while 11% have been engaged in their studies for four and eight years each. Nine percent of the students have been studying for three years, and 10% for six years. Smaller proportions have been studying for five years (8%), seven years (5%), nine years (2%), and ten years (6%).

The data reveal a clear correlation between the length of time students have been living in the U.S. and the length of time they have been studying, with most students indicating similar durations for both suggesting that academic goals were the reason respondents came to the U.S. in the first place.

Figure 4.1.4.: Length of Staying and Studying in the United States



4.1.6. Educational Attainment

The majority of the respondents in the U.S., 80%, are pursuing doctoral degrees, while 20% are enrolled in master's programs. Most of the students, 55%, are enrolled in natural sciences programs. Applied sciences are pursued by 36% of the students, reflecting significant interest in practical and technical fields. Social sciences account for 8% of the students, indicating a smaller but present interest in these areas. Business studies are pursued by 1% of the surveyed students. Approximately 64% of the students received their latest degree from the U.S., while 36% obtained theirs from China. Approximately 59% of the students have completed a master's degree prior to their current studies. Another 40% entered their graduate programs with a bachelor's degree.

Figure 4.1.5.: What degree are you currently pursuing in the US?

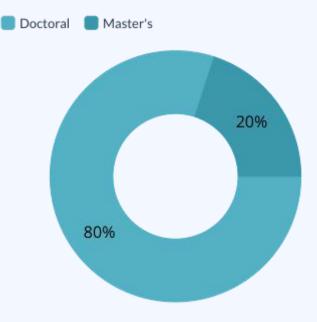


Figure 4.1.6.: What is the field of study for the degree you are currently obtaining?

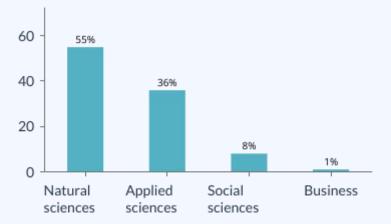


Figure 4.1.7.: What country did you receive your latest educational degree from?

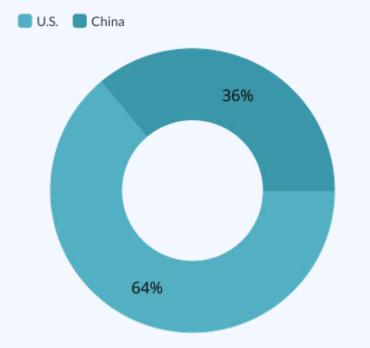
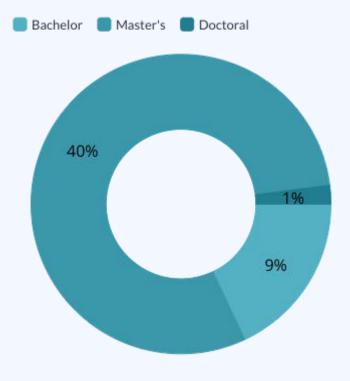


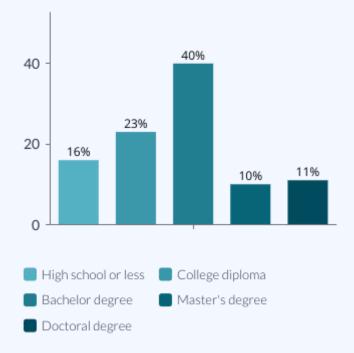
Figure 4.1.8.: What is your highest level of education completed before entering your current graduate program?



4.1.7. Parental Educational Attainment

The highest level of education for 40% of the students' parents is a bachelor's degree. This indicates that nearly half of the surveyed students come from families where at least one parent has attained an undergraduate education. Following this, 23% of the students' parents have a college diploma.

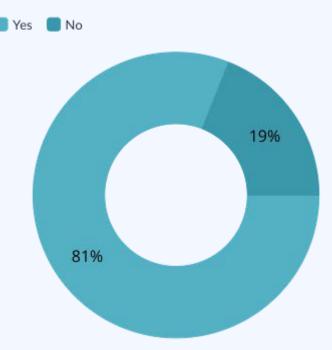
Figure 4.1.9.: What is the highest level of education between your parents?



4.1.8. Being Only Child

A substantial majority of the respondents, 81%, reported to be the only child in their family; 19% of the respondents reported that they are not only children.

Figure 4.1.10.: Are you the only child?



On average, students who identified as only children reported lower household incomes compared to those who had siblings, t(1250) = -6.04, p<.001, d = .9, and attended lower ranking universities, t(1250) = -5.91, p<.001, d = .79. Compared to students with siblings, only children were more likely to plan to remain in the U.S., t(1250) = -2.08, p < .05, d = .48, much more likely to plan on obtaining U.S. residency, t(1250) = -9.63, p<.001, d = .77, and U.S. citizenship, t(1250)= -7.02, p<.001, d = .67. Students who identified as only children had parents with higher level of education compared to students with siblings,

4.2. Reasons to Study in the U.S.

4.2.1. Overall Data

The leading factor for Chinese graduate students to study in the U.S., with 72% of respondents indicating its importance, is the desire to experience life in the U.S. Following closely, 67% of the students sought the best education possible, emphasizing the reputation of U.S. institutions for academic excellence. Additionally, 64% of the respondents were influenced by the access to cutting-edge technology available in the U.S., reflecting the draw of advanced research facilities and resources that support innovative learning. The desire for more freedom in choosing their area of study was significant for 59% of the students.

Family influence also plays a crucial role, with 57% of the students indicating that their families wanted them to receive the best education possible. Improving English proficiency was a key motivator for 56% of the respondents. Additionally, 51% of the students expressed a desire to get out of China, indicating a broader aspiration for new experiences and opportunities outside their home country.

Finally, 35% of the students mentioned that they wanted to live in a different country and believed that getting an education in the U.S. is the right first step.

4.2.2. Disaggregated by Gender

When disaggregated by gender, for female students, the predominant factor was improvement of English proficiency, with 79% stating that their family wanted them to receive the best education possible. In comparison, only 49% of male students were influenced by this factor.

The pursuit of the best education possible is another critical factor, with 74% of female students and 65% of male students indicating this as a reason for studying in the U.S. When considering the desire to live in a different country and viewing education in the U.S. as the right first step, 34% of male students and 42% of female students found this significant.

Access to cutting-edge technology was a factor for 64% of male students but only 62% of female students, highlighting a gender difference in the emphasis placed on technological resources. The desire to experience life in the U.S. influenced 84% of female students and 69% of male students.

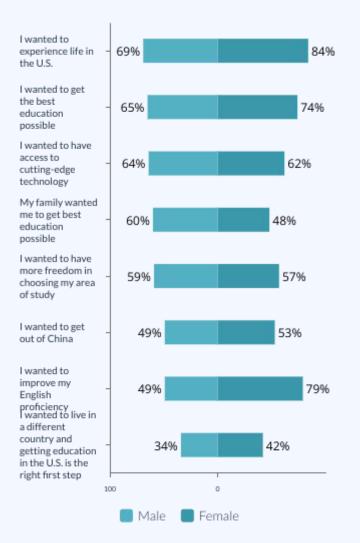
A difference is observed in the desire for more freedom in choosing their area of study, with 57% of female students versus 59% of male students citing this as a motivating factor. The desire to get out of China was a factor for 53% of female students and 49% of male students. Family influence reported 59% of male and 48% of female respondents.

Figure 4.2.1.: Which of the following factors influenced your decision to pursue your studies in the United States? Overall data



Figure 4.2.2.: Which of the following factors influenced your decision to pursue your studies in the United States? Data disaggregated by gender

The differences are statistically significant, p < 0.01.



4.2.3. Predictive Model

The factors influencing the decision to pursue education in the U.S. were collectively predictive of post-graduation behavior, determining whether students opted to remain in the U.S. or return to China (1 = Remain in the U.S., 0 = Returning to China). These variables accounted for 23% of the variance in the decision to stay in the U.S. or go back to China.

- <u>Education Quality:</u> Students who themselves sought the highest quality education were 3.5 times more likely to plan to remain in the U.S. after graduation. On the other hand, those whose families prioritized obtaining the best education, were twice more likely to plan to return to China.
- <u>Living in a Different Country</u>: Similarly, students who aspired to live in a different country and viewed education in the U.S. as the initial step towards that goal were 7.5 times more likely to stay compared to those who did not share this perspective.

- <u>Technology:</u> Those who aimed to access cutting-edge technology were 2.2 times more likely to plan to remain.
- <u>Improving English</u>: On the other hand, students who pursued studies in the U.S. to enhance their English skills were twice more likely to plan return to China.

4.3. Students' attitudes towards American democracy and American education

4.3.1. Attitudes Towards American Democracy

For the statement "American democracy is effective at maintaining order," 45% of respondents agree, 46% disagree, and 9% are unsure. "American democracy has lost its appeal for the American people" shows a divided opinion. Here, 42% of the respondents agree with the statement, 34% disagree, and 24% are unsure.

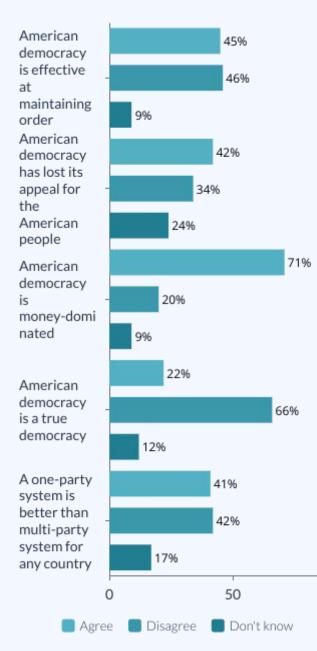
A relative consensus is observed in the responses to the statement "American democracy is money-dominated." An overwhelming 71% of Chinese graduate students agree with this assertion, while only 20% disagree and 9% are unsure.

Regarding whether "American democracy is a true democracy," 22% of the respondents agree, 66% disagree, and 12% are unsure. The majority agreement suggests that many Chinese graduate students still regard American democracy as genuine, despite acknowledging its potential flaws and challenges. The statement "A one-party system is better than a multi-party system for any country" reveals a closely split opinion among the students. Here, 41% agree, 42% disagree, and 17% are unsure.

Focus Groups Insights: Yi, a third-year doctoral student in psychology, observes that while China is undergoing educational reforms with some changes in content areas, the underlying ideology remains unchanged. The Chinese educational system is heavily test-oriented and lacks consideration of cultural perspectives, which Yi finds particularly frustrating due to his poor test-taking skills. He feels that test scores do not accurately reflect his abilities. In China, tests are the primary measure of a student's capability. In contrast, the U.S. education system has gradually shifted away from heavy reliance on testing over the last decade, adopting a more holistic view of students. Yi appreciates this broader approach in the U.S. On the other hand, he acknowledges that China excels in maintaining a standardized curriculum that is unaffected by local politics or culture, which he sees as a strength.

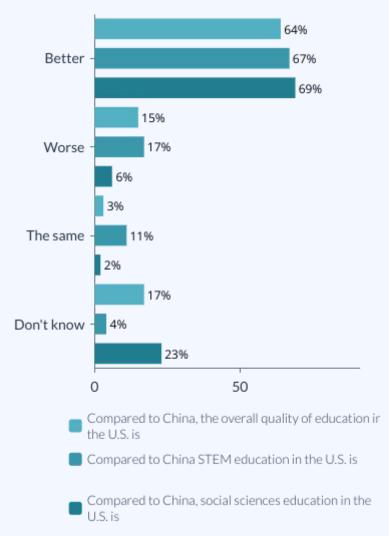
Zhong, a second-year doctoral student in physics, believes that China has a superior educational system, especially in STEM fields, where the curriculum is rigorous and comprehensive. In China, students cannot opt out of technical classes, ensuring a strong foundation in these subjects. In contrast, Zhong views U.S. public schools as lacking strength, particularly because of the emphasis placed on sports. He perceives this focus on athletics as a weakness in the U.S. education system, diverting attention from academic rigor.

Figure 4.3.1.: Attitudes Towards American Democracy



4.3.2. Attitudes Towards American Education

Approximately 64% of Chinese graduate students believe that, compared to China, the overall quality of education in the U.S. is better. Meanwhile, 15% feel it is worse, 3% think it is the same, and 17% are unsure. On STEM (Science, Technology, Engineering, and Mathematics) education, 67% of the respondents perceive U.S. STEM education as better compared to China. Only 17% believe it is worse, 11% consider it the same, and 4% are unsure. Comparing social sciences education between the U.S. and China, 69% of Chinese graduate students view American social sciences education as better, 6% think it is worse, 2% believe it is the same, and 23% are unsure.



4.3.3. Predictive Model

Attitudes towards American democracy and participation in CSSA-organized events, collectively, were predictive of the decision whether students opted to remain in the U.S. or return to China (1 = Remain in the U.S., 0 = Returning to China). These variables accounted for 38% of the variance in the decision to stay in the U.S. or go back to China.

- *Effectiveness of American Democracy:* Students who believed that American democracy is effective in maintaining order were 1.6 time more likely to express willingness to plan to remain in the U.S.
- <u>Appeal of American Democracy</u>: Those students who believed that American democracy has lost its appeal for the American people were 5 times more likely to plan to return to China after completing their graduate studies.
- <u>Money-dominated Democracy</u>: Students who agreed with the statement that American democracy is moneydominated were 5.7 times more likely to plan to remain in the U.S.
- <u>Reliance on CSSA</u>: Students who reported reliance on the Chinese Students and Scholars Association for support were 1.4 times more likely to express their interest to plan to remain in the U.S.

Figure 4.3.2.: Attitudes Towards American Education

4.4. Challenges Faced by Chinese Graduate Students While Pursuing Education in the United States

4.4.1. Discrimination, Accusations of Academic Dishonesty, and Other Challenges

According to the survey data, 68% of Chinese students reported experiencing discrimination off campus due to their nationality. Similarly, 60% of students encountered discrimination within academic environments. As reported by the respondents, verbal harassment is a common issue, with 49% of students reporting that they have been subjected to racial slurs such as "go home" or "back to your own country," either directly or aimed at other Chinese students. Chinese students also face considerable pressure to comment on political and social issues related to their home country. About 22% of students felt compelled to offer opinions on current affairs involving China, often at the behest of their American peers or professors.

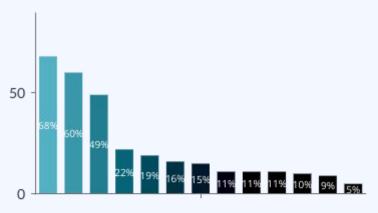
Additionally, 19% of students found themselves defending China's COVID-19 policies in discussions. Accusations of academic dishonesty are another serious challenge. Sixteen percent of students reported being unjustly accused of using AI tools like ChatGPT to produce their work. Furthermore, 11% were unjustly accused by professors or fellow students of cheating on standardized tests, such as the TOEFL, GRE, or GMAT, which are prerequisites for graduate program admissions.

The data also reveals that 11% of students were accused of being Chinese spies by other students or professors, a damaging and unfounded accusation that can severely impact their social and academic life. Another 10% experienced dismissive reactions from professors to questions that implied they had been brainwashed in China, showcasing a deep level of cultural insensitivity and prejudice.

Chinese students often face political pressures related to the home country government. Nine percent reported being pressured to offer opinions on the Chinese Communist Party (CCP), while 5% felt expected to renounce the Chinese government.

Focus Groups Insights: John, a fourth-year doctoral student in Education, has experienced discrimination in the U.S. based on his national origin. He notes that discrimination also exists in China, but it is more age-based. As an older student who began his graduate program later in life, John will be in his late 30s when he graduates, which he feels is considered too old to start a career in China due to age discrimination.

Chen, a third-year doctoral student in Economics, has similarly faced discrimination in the U.S. based on race and Chinese origin. However, as a member of the LGBTQ community, Chen finds that the U.S. offers more acceptance and openness regarding sexuality and greater respect for individuals who differ in this way. Chen believes he will be more accepted in the U.S. than in China, where such openness is less prevalent. Figure 4.4.1.: Considering your educational journey in the United States, have you experienced any of the following issues? Overall data



- I experienced discrimination off campus because of my Chinese nationality.
- I experienced discrimination on campus because of my Chinese nationality.
- I heard racial slurs like "go home/back to China/back to your
 own country" shouted at me or other Chinese students on campus.
- I was pressured to offer opinion on the current affairs involving China by my American peers or professors.
- I defended China's COVID-19 policies in front of my American peers or professors.
- I was unjustly accused of using AI (such as ChatGPT) to produce work in my graduate program.
- I defended Chinese government in front of my American peers or professors.
- I was unjustly accused by professors of cheating on
 standardized tests (such as TOEFL, GRE, GMAT and such) to get into the graduate program.
- I was unjustly accused by students of cheating on
 standardized tests (such as TOEFL, GRE, GMAT and such) to get into the graduate program.
- I was accused of being a Chinese spy by other students or professors.
- I experienced dismissive reaction from professors in response to a question insinuating I was brainwashed in China.
- I was pressured to offer opinion on the Chinese Communist Party (CCP) by my American peers or professors.
- I was expected to renounce Chinese government by my American peers or professors.

4.4.2. Predictive Model

Challenges Chinese graduate students experienced during their educational journey were collectively predictive of postgraduation behavior, determining whether students opted to remain in the U.S. or return to China (1 = Remain in the U.S., 0 = Returning to China). These variables accounted for 75% of the variance in the decision to stay in the U.S. or go back to China.

- Discrimination: Students who experienced discrimination on campus were 4.6 times more likely to plan to return to China, while those who faced discrimination off campus were 3.8 times more likely desire to plan to return.
- Dismissive Reaction: Students who experienced dismissive reaction from professors in response to a question were 4.5 times more likely willing to plan to return to China.
- Unjust Accusations: The who were unjustly accused of cheating on standardized tests such as TOEFL, GRE GMAT and such were five times more likely to plan to return compared to students who did not experience such accusations. Students who were accused of spying for China were 9.3 times more likely to want to return.
- Renouncing Chinese Government: Students who perceived being expected to renounce Chinese government by American peers or professors were 6.6 times more likely to express desire to plan to remain in the U.S. comparing to students who did not perceive this.
- Offering Opinions on Current Affairs: Students who perceived being pressured to offer their opinion on current affairs involving China by their American peers or professors were 8.6 time more likely willing to plan to remain in the U.S.

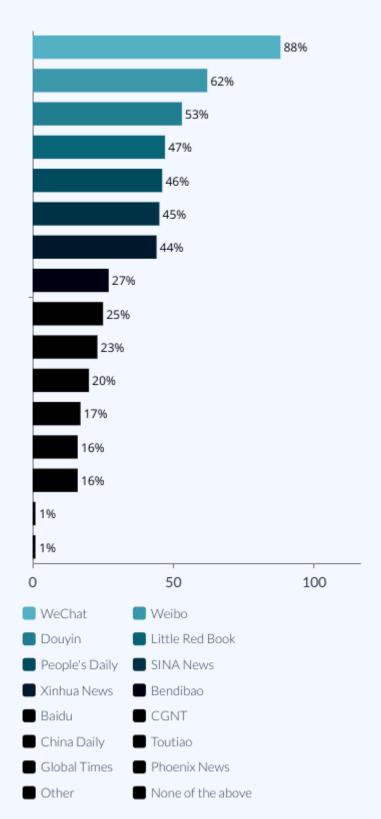
4.5. Information sources for Chinese graduate students in the United States

4.5.1. Chinese Media Sources

WeChat emerges as the most popular platform, with 88% of the respondents using it for news and information. This is followed by Weibo, which is used by 62% of the students. Douyin, the Chinese equivalent of TikTok, is also widely used, with 53% of the respondents indicating it as a source of news. Little Red Book, also known as Xiaohongshu, is used by 47% of the students. People's Daily and SINA News follow closely, with 46% and 45% respectively. Xinhua News, another major news platform, is used by 44% of the respondents.

Other platforms such as Bendibao and Baidu are used by 27% and 25% of the students respectively. CGTN and China Daily are slightly less popular, with usage rates of 23% and 20%. TouTiao is used by 17%, and Global Times and Phoenix News each have a usage rate of 16%.

Figure 4.5.1.: Please indicate from which of the following Chinese platforms you obtain news and information



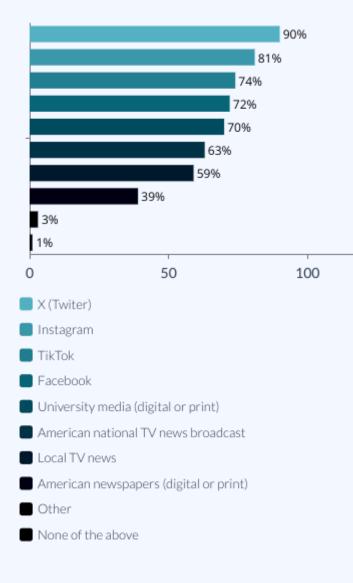
4.5.2. American Media Sources

X (formerly Twitter) stands out as the most frequently used, with 90% of the respondents indicating it as their preferred source. Instagram follows closely behind, being used by 81% of the students. TikTok is also a significant source of news, utilized by 74% of the respondents. Facebook is another major platform for these students, with 72% using it to stay informed. University media, whether digital or print, is trusted by 70% of the respondents.

American national TV news broadcasts are followed by 63% of the students, while local TV news is used by 59%. American newspapers, both digital and print, are used by 39% of the students.

A small fraction, 3%, reported using other unspecified platforms, while none of the respondents indicated that they do not use any of the listed platforms for obtaining news and information.

Figure 4.5.2.: Please indicate from which of the following Chinese platforms you obtain news and information



4.5.3. Predictive Models

American platforms from which students obtain information were predictive of the decision whether students opted to remain in the U.S. or return to China (1 = Remain in the U.S., 0 = Returning to China). These variables accounted for 42% of the variance in the decision to stay in the U.S. or go back to China.

- <u>American Newspapers</u>: Students who obtain information from American newspapers are 3.5 times more likely to stay in the U.S.
- <u>American TV</u>: Students who obtain news from American TV are 20.9 times more likely to plan to remain in the U.S.
- <u>Facebook and X (Twitter)</u>: Students who are tuned to Facebook and Twitter for news are 1.6 and 5 times more likely to plan to return to China, respectively.

Chinese platforms from which students obtain information were predictive of the decision whether students opted to remain in the U.S. or return to China (1 = Remain in the U.S., 0 = Returning to China). These variables accounted for 56% of the variance in the decision to stay in the U.S. or go back to China.

- *Little Red Book:* Students who use Little Red Book for information are 3.9 time more likely to plan to remain in the U.S.
- <u>Bendibao</u>: Students who use Bendibao platform to obtain news are 9.8 times more likely to be planning to return to China after their graduate studies.
- <u>SINA News</u>: Respondents who obtain information from SINA News are 11 times more likely to be planning to return to China after their studies.
- <u>Xinhua</u>: Students tuned to Xinhua for news are 8.9 times more likely to return to China
- <u>China Daily</u>: Students who obtain information from China Daily are 12.5 times more likely to return to China.

Eocus Groups Insights: Yang, a first-year master's student in mental health counseling, expressed that after graduation, they plan to obtain licensure in mental health counseling and remain in the U.S. to utilize all the time available under OPT. Yang hopes to stay longer in the U.S. because the mental health counseling system is more developed and regulated compared to China, providing a clear career path. Yang follows mental health developments in China and feels that the field there is not as structured. There is a possibility of starting a doctoral program in the U.S. While Yang is open to eventually returning to China, the current plan is to remain in the U.S.

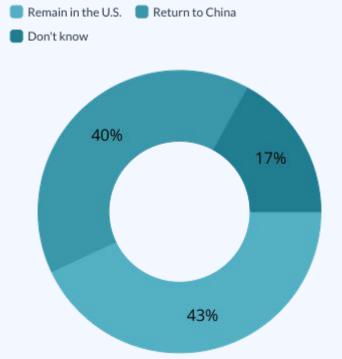
Sara, a third-year doctoral student in Education, intends to stay in the U.S. Her ideal career is in educational legislation, and she wishes to remain in a liberal environment. Her career path is in teacher education, with aspirations to become an Assistant Professor at a U.S. university. Although she has considered returning to China or moving to another English-speaking country, she recognizes that her research focus may not be well-suited to the Chinese context, limiting her options.

4.6. Plans After Graduation: Staying in the U.S. or Returning to China

4.6.1. Post-graduation plans

According to the survey, 43% of the respondents indicated their intention to remain in the United States after completing their studies. Contrariwise, 40% of the surveyed students expressed their plan to return to China post-graduation. Interestingly, 17% of the respondents were unsure about their post-graduation plans.

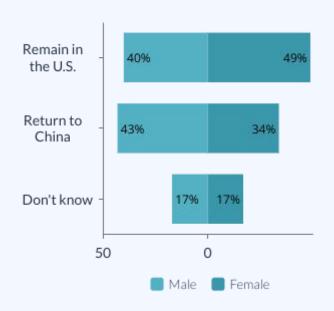
Figure 4.6.1.: What are your plans after graduation? Overall data

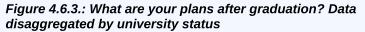


In contrast, the distribution for students attending R1 research universities reveals that 48% plan to remain in the United States, 41% intend to return to China, and only 11% are uncertain.

Figure 4.6.2.: What are your plans after graduation? Data disaggregated by gender

The differences are statistically significant, p < 0.01









4.6.2. Disaggregated by Gender

A comparative analysis of post-graduation plans of Chinese graduate students in the United States, differentiated by gender was conducted. For male students, the distribution is as follows: 40% plan to remain in the United States, 43% intend to return to China, and 17% are unsure about their post-graduation plans.

In contrast, the distribution for female students deviates from the overall data results and shows that 48% plan to remain in the United States, 33% intend to return to China, and 17% are uncertain.

4.6.3. Disaggregated by University Status

In the next step, MI performed a comparative analysis of post-graduation plans of Chinese graduate students in the United States, segmented by the type of institution attended: Ivy League universities and R1 research universities. For students attending Ivy League universities, the distribution shows that 35% plan to remain in the United States, 38% intend to return to China, and 27% are unsure about their post-graduation plans.

4.6.4. Predictive Model

A binary logistic regression analysis was performed to predict the likelihood of Chinese graduate students being uncertain about their decision to stay in the United States or return to China after graduation. For this analysis, the dependent variable (students' plans after graduation) was coded as follows: 1 for those who were unsure ("Don't know" at 17%) and 0 for those who had made a decision ("Remain in the U.S." at 43% or "Return to China" at 40%).

The analysis identified four significant factors that contribute to students' hesitance about deciding whether to return to China or stay in the U.S.:

- Being an Only Child: The strongest predictor of uncertainty was whether the student was an only child. Students who were only children were found to be 8.2 times more likely to respond "don't know" regarding their post-graduation plans compared to those who had already made a decision.
- Type of Degree Pursued: The type of degree being pursued also played a significant role. Students working towards doctoral degrees were twice as likely to be unsure about their future plans compared to those pursuing a master's degree.
- Age: Age was another influential factor. Older students were 1.25 times more likely to be hesitant about their post-graduation plans than younger students.
- University Ranking: The ranking of the university attended also emerged as a significant predictor of hesitance. Students enrolled in higher-ranking universities were 3.8 times more likely to be indecisive about their postgraduation plans compared to those at lower-ranking institutions.

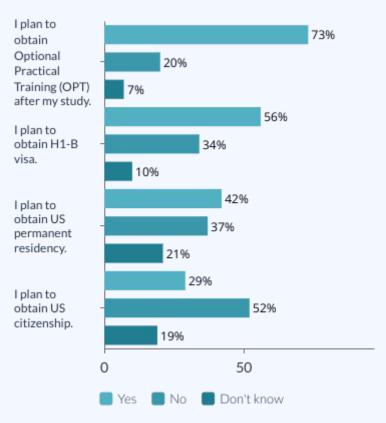
4.7. Plans Regarding Legal Status in the U.S.

A significant majority of the respondents, 73%, plan to obtain Optional Practical Training (OPT)[2] after their studies. However, it is important to state that 68% of students who want to return to China are planning to obtain OPT.

Additionally, 56% of the respondents plan to obtain an H-1B visa, which permits them to work in the U.S. for up to six years in specialty occupations requiring theoretical and practical application of highly specialized knowledge. Furthermore, 24% of the students who plan to return to China intend to obtain an H-1B visa.

Moreover, 42% of the students plan to obtain U.S. permanent residency, also known as a green card. Achieving permanent residency offers significant benefits, including job flexibility, the ability to live and work in the U.S. indefinitely, and a pathway to U.S. citizenship. Meanwhile, 29% of the respondents plan to obtain U.S. citizenship.

Figure 4.7.1.: Please indicate which if the following statements are applicable to you. Responses from all students



4.8. Country Preference to Work After Graduation

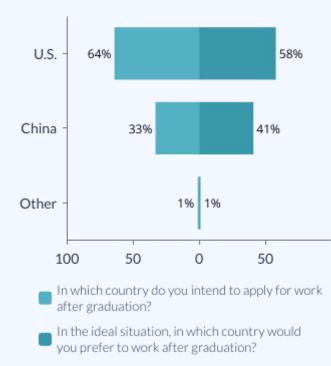
The following analyses illustrate the preferences of Chinese graduate students regarding their desired country of employment post-graduation. The first analysis addresses the question, "In which countries do you intend to apply for work after graduation?" The results reveal that 67% of the respondents intend to apply for jobs in the United States, while 33% plan to apply in China.

The second analysis addresses the question, "In the ideal situation, in which country would you prefer to work after graduation?" Here, the results show that 58% of the respondents would ideally prefer to work in the U.S., while 41% would prefer to work in China.

The disparity between the 67% intending to apply in the U.S. and the 58% who ideally prefer to work there may also indicate that some students feel pragmatic constraints, such as visa issues and job market saturation, influencing their decisions. On the contrary, the 33% intending to apply in China versus the 41% who ideally prefer to work there suggests that while fewer students initially consider China for job applications, a notable portion holds a preference for returning home under optimal conditions.

[2] OPT allows international students to work in the U.S. for up to 12 months (or 36 months for STEM graduates) in their field of study, providing a valuable opportunity to gain practical experience and enhance their resumes

Figure 4.8.1.: In which country do you prefer to work after graduation? Overall data



4.9. Main Reasons to Remain in the U.S., Responses from Students Who Intend to Remain (n = 533)

The primary reason identified by these students is the good economic prospects in the United States, which is cited by 34% of the respondents. Good career prospects in the U.S. are also a substantial factor, mentioned by 27% of the respondents. Political stability in the U.S. is another important reason, cited by 22% of the students. Strict household registration restrictions in China are noted by 15% of the respondents as a factor influencing their decision to stay in the U.S.

A strong social network in the U.S. is mentioned by 7% of the respondents. High housing prices in China are also a concern for 7% of the students. Poor environmental conditions in China, including issues like pollution and food safety, are important deterrents for 5% of the respondents. Attractive policies for international students remaining in the U.S. are noted by 4% of the respondents. Favorable conditions for foreign students in the U.S. are also cited by 3% of the respondents.

The ability to obtain permanent immigration status in the U.S. is another reason for 3% of the students. Lastly, 2% of the respondents mentioned a negative perception towards professionals returning to China as a factor in their decision to stay.

Figure 4.9.1.: Can you identify 3 main reasons why you intend to remain in the U.S.? Responses from students who intend to remain



4.10. Main Reasons to Returning to China, Responses from Students Who Intend to Return (n = 497)

The primary reason identified by students who indicated a desire to return to China after completing their studies is family reunification, which is cited by 41% of the respondents. The second most substantial factor, mentioned by 23% of respondents, is the good economic prospects in China.

A strong social network in China is also a compelling reason for returning, as indicated by 21% of the students. Another 21% of respondents cited discrimination against Chinese individuals in the United States as a motivating factor for returning to China.

Political stability in China is mentioned by 16% of the respondents as an important factor. Additionally, good career prospects in China are noted by 15% of the students as a reason for returning. Similarly, 15% of respondents indicated that their inability to obtain permanent immigration status in the United States influenced their decision to return to China.

A smaller percentage, 4%, mentioned unfavorable conditions for foreign students in the U.S. as a reason for their desire to return. Finally, 2% of respondents highlighted attractive policies for returning overseas talents to China as a motivating factor.

4.11. Policies and measures to influence students' decision to return to China

4.11.1. Overall Data

Among various policies, the one that received the highest endorsement, with 93%, is for providing financial support for overseas talents and their families. Close behind, 88% favor one-time incentives for returning talents and their families. The assistance for the relocation of spouses of overseas talents is also highly valued, receiving 87% approval, indicating that family considerations are a major factor in the decision to return. The support for major technology projects led by overseas talents and the elimination of household registration restrictions are viewed as less influential but still important, with 44% and 49% respectively.

Figure 4.10.1.: Can you identify 3 main reasons why you intend to return to China? Responses from students who intend to return

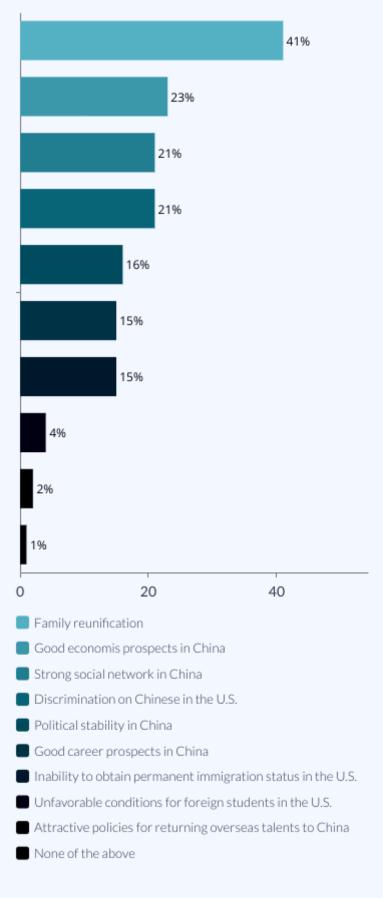
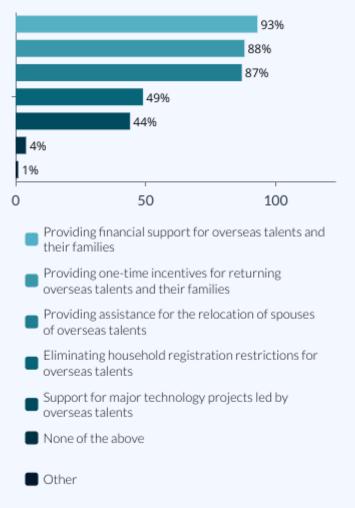


Figure 4.11.1.: All things considered, which policies/measures would more encourage you returning to China? Overall data



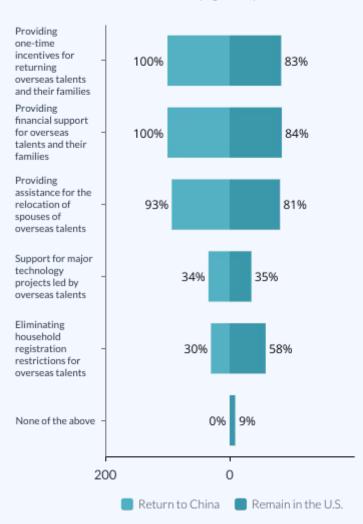
4.11.2. Disaggregated by Attitudes Towards Returning to China

Further analysis provides a breakdown of the preferences of graduate students in the U.S. regarding specific policies or measures that might encourage them to return to China. Providing one-time incentives for returning overseas talents and their families is viewed as highly encouraging by 100% of the respondents who would consider returning to China, while 83% of those who prefer to remain in the U.S. also find this appealing. Similarly, 100% of potential returnees find providing financial support for overseas talents and their families encouraging, contrasted with 84% of those who would stay in the U.S.

Assistance for the relocation of spouses is also notably favored by those considering a return, with 93% support, reflecting the importance of familial factors in such decisions. In contrast, policies like support for major technology projects and eliminating household registration restrictions are less influential, but important, receiving only 34% and 30% approval, respectively, among those who would consider returning.

Figure 4.11.2.: All things considered, which policies/measures would more encourage you returning to China? Data disaggregated by attitudes towards returning to China





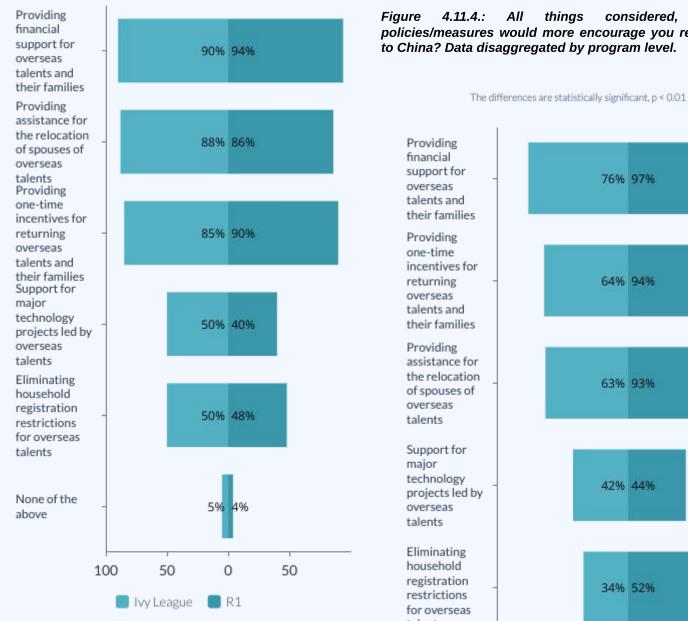
4.11.3. Disaggregated by University Status

Additional disaggregation compared the preferences of graduate students from Ivy League institutions versus those from R1 research universities concerning policies that could motivate them to return to China. For students from R1 universities, the most compelling policy is providing one-time incentives for returning overseas talents and their families, with 90% favorability, compared to 85% among Ivy League students. Providing financial support for overseas talents and their families also holds significant appeal, with 94% of R1 respondents and 90% of Ivy League respondents in favor.

Assistance for the relocation of spouses is also highly rated, with 88% of Ivy League students and 86% of R1 students finding this policy encouraging. However, support for major technology projects and the elimination of household registration restrictions are less prevalent, especially among Ivy League students, with only 50% supporting each policy. In contrast, R1 students show a slightly less favorable stance towards these policies, with 40% and 48%, respectively.

Fiaure 4.11.3.: All things considered, which policies/measures would more encourage you returning to China? Data disaggregated by university status.

The differences are statistically significant, p < 0.01

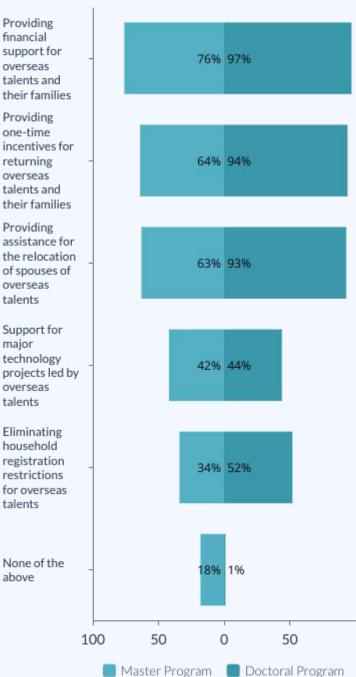


4.11.4. Disaggregated by Program of Study

Doctoral students show overwhelming support for all proposed measures, with 97% in favor of financial support for overseas talents and their families, 94% for one-time incentives for returning overseas talents, and 93% for assistance with the relocation of spouses. On the other hand, master's students are generally less enthusiastic about these policies. While a significant majority still endorse them—76% for financial support, 64% for one-time incentives, and 63% for spousal relocation assistance-their enthusiasm is considerably lower compared to their doctoral counterparts.

For the more professionally oriented measures such as support for major technology projects and eliminating household registration restrictions, both groups show less interest, but doctoral students remain more receptive (44% and 52%, respectively) compared to master's students (42% and 34%, respectively).

things considered. which policies/measures would more encourage you returning to China? Data disaggregated by program level.



4.11.5. Disaggregated by Gender

For male respondents, there is a relatively balanced distribution across the different policy options, with 91% endorsing financial support for overseas talents and their families. This is followed by an approximately equal preference for providing incentives for returning overseas talents and their families (88%) and assistance for the relocation of spouses of overseas talents (86%). Forty-nine percent of male respondents stated that they will favor eliminating household registration restrictions for overseas talents.

Female respondents showed a similar pattern of preferences. The most favored policy is also providing financial support for overseas talents and their families (99%). This is followed by providing one-time incentives for returning overseas talents and their families (89%) and eliminating household registration restrictions (51%).

Figure 4.11.5.: All things considered, which policies/measures would more encourage you returning to China? Data disaggregated by gender



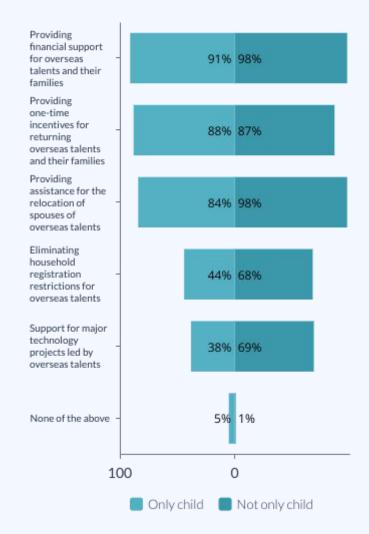
4.11.6. Disaggregated by Being Only Child

For only children, the policy that would encourage the return to China the most is providing financial support for overseas talents and their families (91%). This is closely followed by providing financial support for returning overseas talents and their families (88%) and providing assistance for the relocation of spouses of overseas talents (84%). Support for major technology projects and eliminating household registration restrictions were less favored, with 38% and 44% respectively.

In contrast, students who are not only children show a slightly different pattern in their preferences. The leading policy for them is also providing financial support for overseas talents and their families, at 98%. This is closely matched by the provision of one-time incentives for returning overseas talents and their families (87%), and assistance for the relocation of spouses (98%). Support for major technology projects and eliminating household registration restrictions are the least prioritized, at 69% and 68%, respectively.

Figure 4.11.6.: All things considered, which policies/measures would more encourage you returning to China? Data disaggregated by being an only child

The differences are statistically significant, p < 0.01



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4.11.7. Predictive Model

Policies that Chinese graduate students perceived important were collectively predictive of the decision whether students opted to remain in the U.S. or return to China (1 = Remain in the U.S., 0 = Returning to China). These variables accounted for 20% of the variance in the decision to stay in the U.S. or go back to China.

The analysis revealed three main factors that significantly influence students' decisions:

- Policy of Household Restriction: This refers to the regulations and policies related to household registration in China ("Hukou" system). The analysis found that students who consider these policies important are 4.7 times more likely to decide to stay in the United States rather than planning to return to China.
- One-Time Incentive for Returning Talents: The analysis showed that offering such one-time incentives makes students 3.5 times more likely to plan to return to China compared to those who do not receive such incentives.
- Support for Returning Talents and Their Families: The findings suggest that students who perceive there is ample support for them and their families upon their return are 3 times more likely to go back to China than those who do not see such support.

4.12. Career choices of Chinese graduate students in China and the United States

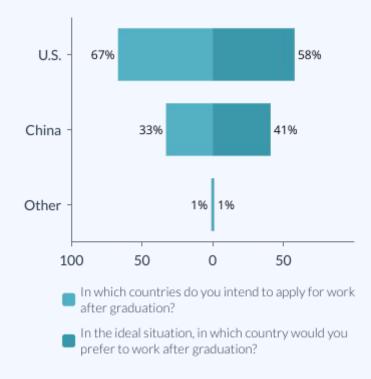
4.12.1. Countries Where Students Intend to Apply for Work

The data revealed that 67% of the respondents plan to seek employment in the United States. On the other hand, 33% of the surveyed students expressed their intention to return to China for their professional careers. Approximately 1% of the respondents indicated that they would apply for work in countries other than the United States or China. The responses included Australia, Canada, France, Germany, the United Kingdom, Singapore, Taiwan, "Other English or French-speaking countries," "Other Chinese-speaking countries."

4.12.2. Countries Where Students Intend to Work in the Ideal Situation

Further analysis showed that 58% of the respondents would prefer to work in the United States in an ideal situation. On the other hand, 42% of the surveyed students indicated that they would ideally prefer to work in China.





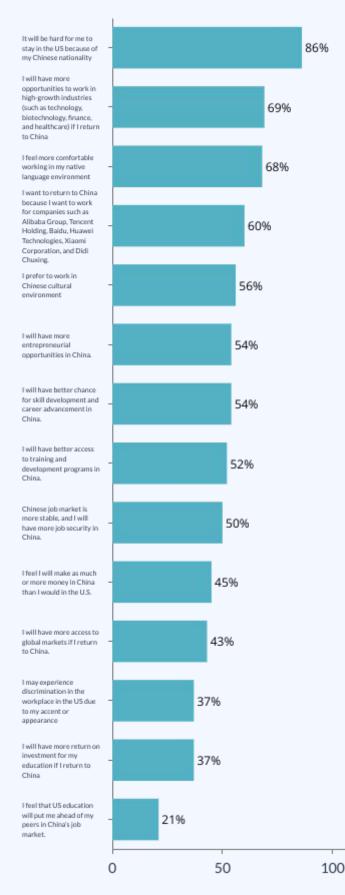
4.12.3. Reasons for Pursuing Career in China

The most prominent reason, selected by 86% of respondents, is the difficulty of staying in the US due to student's Chinese nationality. A substantial 69% of students believe they will have more opportunities to work in high-growth industries, such as technology, biotechnology, finance, and healthcare, if they return to China. Additionally, 68% of the respondents feel more comfortable working in their native language environment. Approximately, 60% of students expressed a desire to work for major Chinese companies, including Group, Tencent Holding, Baidu, Huawei Alibaba Technologies, Xiaomi Corporation, and Didi Chuxing.

About 56% of respondents prefer to work in a Chinese cultural environment, reflecting a desire to maintain cultural ties and integrate more seamlessly into the workplace. Other important reasons include the perception of better entrepreneurial opportunities (54%), enhanced chances for skill development and career advancement (54%), better access to training and development programs (52%), and greater job stability and security in China (50%).

Further, 45% believe they will earn as much or more money in China compared to the US, and 43% feel they will have better access to global markets. Concerns about potential discrimination in the US workplace due to their accent or appearance were cited by 37% of respondents. An equal proportion, 37%, believe they will get a better return on investment for their education if they return to China. Finally, 21% feel that their US education will give them an edge in the Chinese job market.

Figure 4.12.2.: Please share your reasons for pursuing career in China. Responses from students who intend to work in China



4.12.4. Reasons for Pursuing Career in the United States

Approximately 91% of respondents believe that students will make as much or more money in the US compared to China. Close behind, 90% of students believe they will have better access to training and development programs in the US. Further, 87% of respondents feel that their US education will make them competitive in the US job market, highlighting the value placed on local educational credentials. Similarly, 87% believe they will have more access to global markets if they remain in the US, suggesting the importance of international career opportunities. Meanwhile, 83% of the students see better chances for skill development and career advancement in the US, which emphasizes the perceived superior career growth opportunities. Additionally, 81% want to work for major US companies such as Facebook, Apple, Amazon, Netflix, and Google, indicating the strong allure of these tech giants.

Approximately, 78% of respondents feel comfortable working in an English-speaking environment. An equal proportion (78%) believes they will have more opportunities in highgrowth industries like technology, biotechnology, finance, and healthcare in the US. About 72% of students prefer working in an American cultural environment, suggesting a preference for the lifestyle and work culture in the US. The stability of the US job market, with 65% of respondents highlighting job security, is another important factor.

4.13. Acculturation of Chinese graduate students in the United States

4.13.1. Social Circles of Chinese Graduate Students in the U.S.

The survey examined the social circles of Chinese graduate students studying in the U.S. The data reveals that a substantial majority of Chinese graduate students, approximately 82%, primarily socialize with other Chinese individuals stating that most of their friends are Chinese. In contrast, only 12% of these students report having mostly American friends. Additionally, 6% of the respondents indicated that most of their friends are from other countries.

Figure 4.12.3.: Please share your reasons for pursuing career in the United States. Responses from students who intend to work in the United States

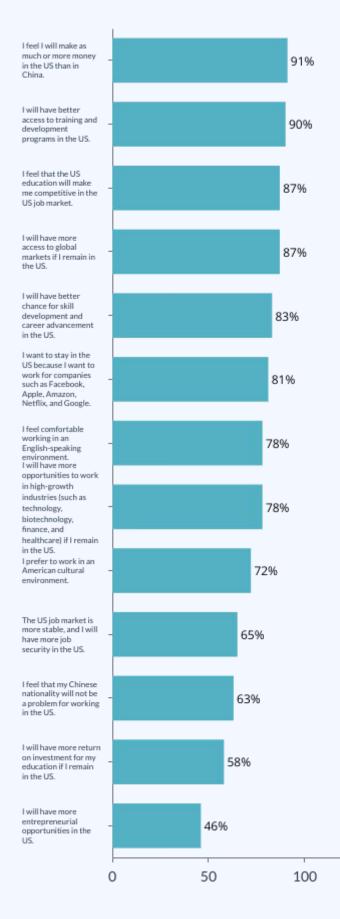
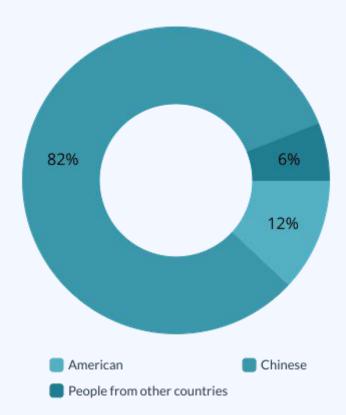


Figure 4.13.1.: Most of my friends are. Overall data



4.13.2. Experiences of Students While in the United States

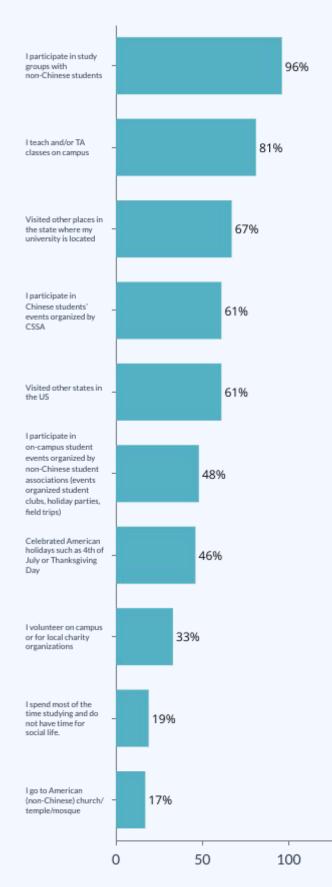
Almost all Chinese graduate students, 96%, indicated that they participate in study groups with non-Chinese students. Further, 81% of the respondents reported teaching or taking on TA roles on campus, which is usually a requirement in the most U.S. graduate programs.

Traveling and exploring seem to be popular activities among Chinese graduate students, with 67% visiting other places within the state where their university is located and 61% exploring other states in the U.S.

Participation in Chinese students' events organized by the Chinese Students and Scholars Association (CSSA) is also considerable, with 61% of respondents engaging in such activities. In contrast, 48% of the students take part in on-campus events organized by non-Chinese student associations. Similarly, 46% celebrate American holidays such as the 4th of July or Thanksgiving Day.

Volunteering on campus or for local charity organizations is reported by 33% of the respondents. Moreover, 19% of the students mentioned spending most of their time studying without having time for social life. Additionally, 17% of the students attend American (non-Chinese) houses of worship.

Figure 4.13.2.: While studying in the United States, have you had any of the following experiences? Overall data



4.13.3. Predictive Model

Items probing acculturation of Chinese graduate students into American society were predictive of the decision whether students opted to remain in the U.S. or return to China (1 =Remain in the U.S., 0 = Returning to China). These variables accounted for 49% of the variance in the decision to stay in the U.S. or go back to China.

- <u>Going to American (non-Chinese) House of Worship</u>: Students who attend American (non-Chinese) houses of worship are 3.8 times more likely to plan to remain in the U.S.
- <u>Participation in Campus Events:</u> Students who participate in on-campus events organized by student associations (not CSSA) are 2.6 times more likely to plan to remain in the U.S. These events may include student clubs, holiday parties, and field trips.
- <u>Volunteering</u>: Respondents who volunteer for local charity organizations are twice more likely to plan to remain in the U.S.
- <u>Traveling within the U.S.</u>: Respondents who visited other places in the state or traveled outside of the state where their university is located are 8.2 times more likely to plan to remain in the U.S.
- <u>Celebrating American Holidays</u>: Students who reported to celebrate American holidays such as 4th of July or Thanksgiving Day are 2.8 times more likely to plan to remain in the U.S.

Focus Groups Insights: Xuwei, a first-year doctoral student in mathematics, describes different levels of friendship, noting that his closest friends are Chinese due to their shared cultural connections. He observes that when he asks his American friends for help, they often suggest he ask his parents, highlighting a cultural disconnect. Despite this, Xuwei considers himself well-adapted to U.S. culture, but he remains closer to his Chinese friends because of their mutual understanding and cultural ties.

Tommy, a third-year doctoral student in mathematics, shares that most of his friends are Chinese or international students, with only a few American friends. When he needs assistance, he is more likely to reach out to his Chinese friends. This preference suggests a comfort level and trust based on shared cultural backgrounds and experiences.

PART V: SUMMARY

The decision-making process for Chinese students contemplating whether to remain in the United States or return to China after graduation is shaped by many factors including demographic characteristics, educational experiences, motivational factors, social integration, and external influences such as media consumption and government policies.

5.1. Motivational Factors

5.1.1. Educational Quality and Career Aspirations

Students who seek the highest quality education are more likely to plan to remain in the U.S. post-graduation. The advanced research facilities, academic mentorship, and professional opportunities offered by U.S. institutions attract students aiming for excellence in their fields. These students often perceive the U.S. as providing unparalleled opportunities for growth and development, leading them to extend their stay to maximize their educational investment.

On the other hand, students whose families emphasize educational quality as a means to enhance prospects back home are twice as likely to return to China. For these families, education abroad is seen as a tool to elevate family's social status and gain international experience and skills that can be applied within the Chinese context, contributing to the country's development and family's prestige.

5.1.2. Living Abroad and Access to Technology

The aspiration to live abroad is a powerful motivator for students who view their U.S. education as the first step toward establishing a life in another country. These students are 7.5 times more likely to plan to remain in the U.S., reflecting their desire for a cosmopolitan lifestyle and exposure to diverse cultures. The U.S. is often seen as a land of opportunity, where students can achieve personal and professional aspirations that may not be readily available in China.

Access to cutting-edge technology is another significant factor influencing the decision to stay. The U.S. is renowned for its technological advancements and innovation hubs, which provide students with opportunities to work on the latest technological developments and collaborate with industry leaders. Students who prioritize technological access are more likely to plan to remain in the U.S., as they seek to build careers in dynamic and innovative environments.

5.2. Social and Cultural Experiences

5.2.1. Experiences of Discrimination

Experiences of discrimination, both on and off campus, have a profound impact on students' post-graduation decisions. Discrimination can manifest in various forms, including racial prejudice, cultural insensitivity, and systemic barriers, which undermine students' sense of belonging and security. Those who encounter discrimination are significantly more likely to return to China, as negative social environments can diminish the perceived benefits of staying abroad.

Additionally, dismissive reactions from professors and unjust accusations, such as being accused of cheating on standardized tests, further exacerbate feelings of alienation. These experiences are detrimental to students' academic and emotional well-being, prompting many to consider returning to a more supportive and familiar environment in China.

5.2.2. Media Consumption

Media consumption patterns significantly influence students' perceptions and decisions. Those who engage with American media, such as TV and newspapers, are more likely to plan to remain in the U.S., as these sources often portray opportunities and lifestyles that align with their aspirations. Conversely, students who rely on Chinese media platforms are more inclined to return to China, as these outlets may emphasize national pride, economic opportunities, and social stability in the home country.

The media acts as a lens through which students view their experiences and evaluate their options. Positive portrayals of life in the U.S. can reinforce the desire to stay, while narratives emphasizing China's growth and opportunities can motivate a return.

5.3. Social Integration and Participation

5.3.1. Involvement in American Culture

Participation in American cultural practices and social activities is strongly associated with the decision to remain in the U.S. Students who engage with American culture through attending houses of worship, celebrating holidays, and participating in campus events develop a sense of belonging and integration that encourages them to stay. These activities help students build social networks, improve language skills, and gain a deeper understanding of American society.

Volunteering and traveling within the U.S. further enhance students' connection to their host country. These experiences allow them to explore different regions, interact with diverse communities, and develop a broader appreciation for the country's cultural and geographical diversity.

5.3.2. Support and Incentives for Returning

While some students are drawn to remain in the U.S. due to social integration and cultural affinity, others are influenced by the support systems and incentives offered in China. Students who are aware and appreciate meaningful support for returning talents and their families are 3 times more likely to return to China. China offers various programs and incentives to attract overseas talents, including financial rewards, career opportunities, and assistance with settling in.

PART V: SUMMARY

One-time incentives, such as financial bonuses for returning talents, increase the likelihood of returning by 3.5 times, highlighting the effectiveness of these strategies in encouraging students to contribute to China's development. These incentives reflect China's commitment to reversing the brain drain and leveraging the skills and expertise of its educated diaspora.

5.4. Demographic and Educational Influences

5.4.1. Being an Only Child

Being an only child has been identified as a significant predictor of uncertainty in post-graduation plans. The unique family dynamics associated with being an only child, particularly in Chinese culture, often lead to heightened expectations and responsibilities. Only children face considerable pressure to succeed academically and professionally, which may influence their indecisiveness about remaining abroad or returning home. This indecision can be attributed to familial obligations, such as caring for aging parents or contributing to family enterprises, which are more pronounced for only children.

Moreover, the one-child policy that prevailed in China for several decades has contributed to the emergence of "Little Emperor Syndrome," where only children are perceived as indulged and burdened with high parental expectations. This familial pressure often compels these students to prioritize family responsibilities over personal career ambitions, thereby increasing the likelihood of returning to China after graduation.

5.4.2. Degree Type and University Ranking

The type of degree pursued significantly impacts students' post-graduation plans. Doctoral students face longer academic journeys and often engage in specialized research, which provides them with broader career opportunities and potentially higher stakes in their decision-making processes. This extended exposure to the academic and professional landscape in the U.S. may foster stronger professional networks and deeper ties, thereby influencing their decision to remain.

University ranking also plays a pivotal role in shaping students' career aspirations. Students from higher-ranked universities are 3.8 times more likely to be indecisive about their post-graduation plans due to the competitive job market both in the U.S. and China. Graduates from prestigious institutions are often targeted by leading global companies, creating a dilemma between pursuing opportunities in the U.S. or leveraging their elite education to secure influential positions in China.

5.5. Conclusion

The decision of Chinese graduate students to stay in the U.S. or return to China after graduation is influenced by a myriad of factors. Understanding these influences can help policymakers and educators create environments that support students' goals and facilitate their contributions to both countries. As China continues to increase its investment in research and development, the dynamics of student mobility may evolve, further impacting the global landscape.

5.6. Limitations

The limitations of this study include the self-selected nature of the sample, which may introduce bias as participants who are more motivated or interested in the topic are more likely to respond, potentially skewing the results. Additionally, the survey design offers limited space for elaboration on responses, restricting the depth of insights that could be obtained from participants' experiences and perspectives. In terms of gender distribution, the survey responses were male dominated. Finally, the non-experimental nature of the research limits the ability to establish causal relationships between the factors examined and the conclusions that can be drawn from the findings.

PART VI: RECOMMENDATIONS

6.1. Recommendations for the U.S. to Retain Talent

- Facilitate Pathways to Permanent Residency and <u>Citizenship</u>: To retain talented students, particularly those who have completed doctoral programs at top-tier research institutions, the U.S. should streamline the process for obtaining permanent residency and citizenship. This could involve expanding access to H-1B visas and OPT, as well as easing the transition to green cards for highly skilled individuals. Ensuring that talented international graduates have a clear, expedited path to long-term residency could help retain individuals who would otherwise return to their home countries.
- <u>Enhance Career and Economic Incentives:</u> Strengthening job placement programs for international graduates, particularly in high-demand fields such as STEM, could enhance the attractiveness of staying in the U.S. Additionally, fostering collaborations between universities and American industries to offer more internships and job opportunities to international students may motivate them to remain in the country.
- <u>Address Concerns about Discrimination and Inclusion:</u> The U.S. universities and communities should work to reduce discrimination and create more inclusive environments for international students. Reducing bias in hiring practices, addressing racial profiling, and ensuring that international students feel secure and welcomed are critical to encouraging them to stay.
- <u>Expand Social and Cultural Integration Programs:</u> Facilitating social integration by encouraging more inclusive student organizations and fostering cross-cultural exchange could help international students develop strong social networks. Promoting involvement in non-Chinese communities, organizing diverse cultural events, and supporting campus volunteer opportunities could enhance students' sense of belonging, making them more inclined to stay.
- <u>Support Affordable Housing Initiatives:</u> Given the high housing costs that concerns some international students, offering affordable housing options, particularly in metropolitan areas where such costs are most burdensome, would help to alleviate one of the key deterrents to remaining in the U.S. Collaborating with local governments to develop affordable housing for international talent could be a strategic retention measure.

6.2. Recommendations for China to Encourage Return of Talent

- <u>Provide Financial Support for Returning Talents</u>: To attract graduates back to China, the government should offer substantial financial incentives such as grants, subsidies, and tax relief for returning professionals. Financial support for family relocation and integration programs would also make the transition smoother for returning students. This could be combined with offering competitive salaries, benefits, and housing allowances to compete with U.S. opportunities.
- Facilitate Career Development in High-Growth Sectors: China should promote opportunities in high-growth sectors such as technology, artificial intelligence, and innovation hubs, which are particularly appealing to returning graduates. Collaborations with Chinese tech giants and industry leaders can create clear career paths for returning talents, ensuring that they have access to meaningful employment opportunities that match their skills and aspirations.
- <u>Relax Residency Restrictions and Improve Living</u> <u>Conditions:</u> Easing the Hukou (household registration) system, particularly in major cities where returnees might seek employment, would remove one of the main obstacles faced by students considering returning to China. Additionally, improving urban living conditions, addressing pollution, and developing more affordable housing would make China a more appealing place to return for talented graduates.
- <u>Strengthen Global Market Access</u>: Highlighting China's integration into global markets, particularly in sectors like technology and finance, could attract graduates back by offering them international exposure and opportunities for career growth. Promoting China's role in international business and emphasizing the ability to work in a globally connected environment could be particularly persuasive for undecided students.
- <u>Develop Entrepreneurial Support Programs</u>: China should offer robust support for returning graduates interested in entrepreneurship by providing start-up funding, tax incentives, and business incubation programs. This would appeal to students who see greater entrepreneurial opportunities in the U.S. and might otherwise choose to stay. Government-led initiatives to promote innovation and provide venture capital for new businesses would help attract and retain returning talent.

PART VII: REFERENCES

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