

The Chinese Students' Motivations for their Higher Education in the U.S.

Yanni Ping¹, Chiang-nan Chao², Yingchuan Wang³, & Frankie Changli Wang⁴

Abstract

This study focuses on why Chinese students come to the U.S. for their higher education. This student population plays a vital role in American colleges and universities, and provides a much needed source of financial revenue. The results indicate that Chinese students are seeking education with a worldview and opt to break from the Chinese system of learning. This article seeks to offer both academicians and university administrators a better understanding of the reasons of these Chinese students, and contributes to the knowledge area extant on this population.

Keywords: International education, Cultural diversity, International students, Chinese students in U.S.

1. Introduction

According to data from the U.S. Department of Commerce, international students contributed \$44.7 billion to the U.S. economy in 2018 and creating more than 550,000 job in this country (IIE Report, 2019). The total number of international students reached 1,095,299 at U.S. colleges and universities. The economic contributions of international students are in addition to the immeasurable academic and cultural values these students bring to US campuses and local communities (NAFSA Report, 2019). Open Doors 2019 reports that about 65 percent of all international students receive the majority of their funds from sources outside of the United States, including personal and family sources as well as assistance from their home country governments or universities. Meanwhile, many U.S. universities are facing an increasingly tough financial situation with a shortage of domestic students, a decrease in corporate support, and declines in government subsidies. In such a situation, international students with money to spend may fill that financial gap (WES Report, 2015; Joseph, 2012). Conversely, the home countries of these international students hope their students return home and contribute to their home economy.

Attracting the best students from around the world has become a large and growing global export opportunity (2016 Top Markets Reports Education, 2016). The U.S. has maintained its leading position for attracting international students, while China has become the largest single source of international students studying in the United States. As the economic impacts of the international students are substantial, educators and researchers seek to understand this phenomenon and identify better ways to serve this population, not only as an educational strategy, but also an international business strategy. This research, through an empirical setting intends to explore the drives of Chinese students who choose to study in the U.S. in order to provide insights and direction for educators, university administrators, and trade administrators.

2. Literature Review

¹Assistant Professor in the Business Analytics and Information System Department, the Peter Tobin College of Business at St. John's University, New York, USA. Her main area of research is operations management and predictive analytics with marketing interfaces.

²Professor of Management, the Peter Tobin College of Business at St. John's University, New York, USA. His publications can be found in *Journal of World Business*, *the Journal of Supply Chain Management*, *the International Journal of Physical Distribution and Logistics Management*, *the Journal of Strategic Marketing*, *the Journal of Education for Business*, *the Industrial Marketing Management*, *Organizations and People*, *Journal of Teaching in International Business*, etc.

³ worked in the past 19 years in multiple roles with Lehman Brothers, Goldman Sachs, and BNP Paribas, Hong Kong. Her researches focus on Statistics model applications in investment market.

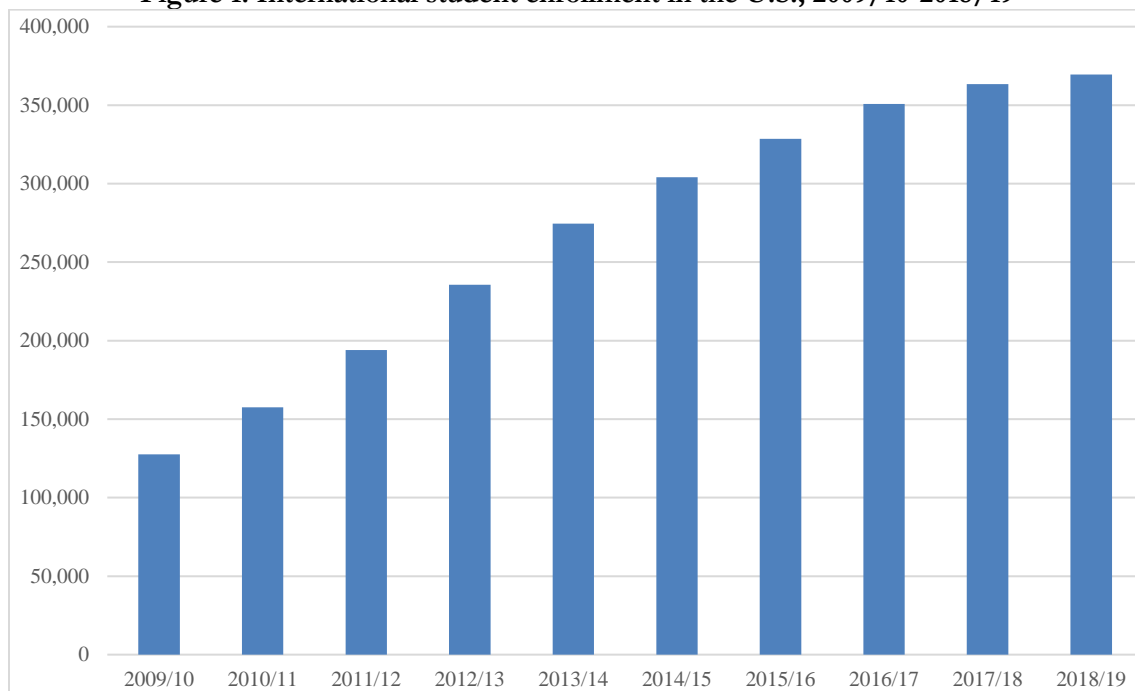
⁴an Executive Director at People Insurance Company of China, managing PICC' asset allocation internationally. He also worked in investment banking at GF Securities as Head of Asia Pacific prior to PICC. He has more than 15 years experience in businesses.

Chinese families place education a top priority for thousands of years. China's economic reforms during the past decades have led a rapid growth in wealth and a shrinking family size. So Chinese families to send children to international universities has become less burdensome. On the other hand, Chinese parents are tired of an education system that focuses mainly on academic scores at the expense of pupil's overall development, and many other drawbacks in China's educational system, make them seriously consider sending their children abroad for higher education (Yan, 2015).

The inflow of the Chinese students in the U.S. between 2009/10 and 2014/15 grew at double digits, from 2009/10 to 2012/13 academic years, the growth rates kept at more than 20 percent a year. It is unlikely that the exponential growth in Chinese students in the U.S. would continue indefinitely. U.S. universities are increasingly focused on diversifying their campuses and are hesitant to depend on foreign students from any individual country. In addition, the Chinese Government has significantly increased its efforts to build high quality universities in China, which could emerge as new competitors to U.S. universities. Chinese universities are also under pressure from the government to offer academic programs that facilitate an easier way to employment, other English-speaking countries also offer education in English and at a lower cost in tuition and fees than many U.S. universities. The Internet and social media serve as critical components for successful recruitment. It is also important to note that Chinese families from smaller cities in China's interior provinces have the financial resources and interest to participate in studying abroad. Second and third-tier Chinese cities are an excellent market for U.S. schools and colleges interested in recruiting Chinese students (2016 Top Markets Reports Education, 2016).

2015/16 year, the growth rate declined to single digit. In the two most recent academic years (2017/18 and 2018/19), the growth rates of the Chinese students in the U.S. dipped to a single digit of 3.58 and 1.7 percent respectively from the previous years, even the total number of students reached 369,548 (2018/19), representing 33.74% of the total international students, while the overall international students grew only 0.05% (IIE Report, 2019). The decline in growth rate could be attributed to many factors, i.e., a visa restrictions and certain sensitive fields of study, i.e. STEM (Zou, 2019). However, the Chinese student visas are now good for five years, instead of one, meaning there are fewer visa renewals but not necessarily fewer students (Meckler & Korn, 2018). Figure 1 shows the ten years growths of the Chinese students in the U.S.

Figure 1. International student enrollment in the U.S., 2009/10-2018/19

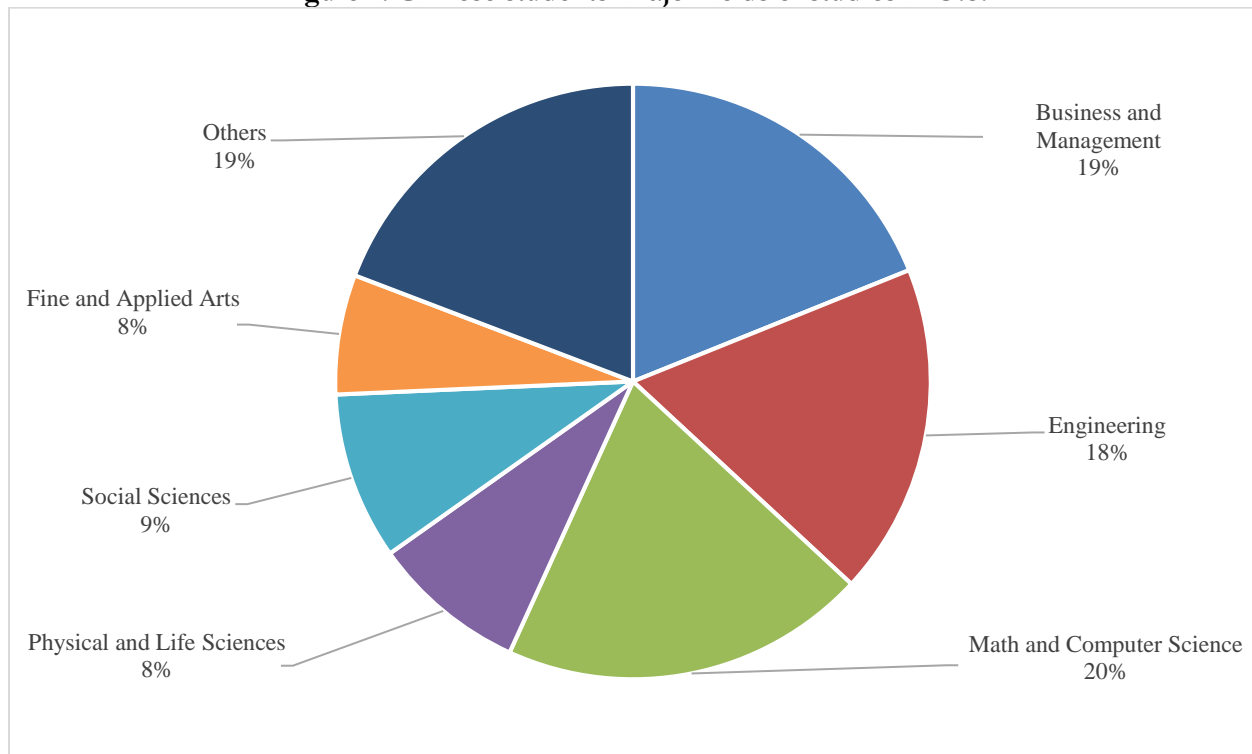


Source: IIE Report, November 2019. <https://www.iie.org/en/Research-and-Insights/Open-Doors/Data/International-Students/Enrollment>

For Chinese students in the 2018/19 year, the top fields of study are business/management. Among all the majors, 19% of Chinese students choose business and management, the knowledge and skills enable Chinese students

to find employments in China, however, that a decline from 29% in 2012/13 (IIE Report, 2019). Figure 2 presents the major fields of study for the Chinese students in the U.S.

Figure 2. Chinese students' major fields of studies in U.S.



Source: IIE Report, November 2019. <https://www.iie.org/Research-and-Insights/Open-Doors/Data/International-Students/Fields-of-Study>

Besides economic wellbeing, many Chinese parents and their kids decide to study abroad because they believe there is a better-quality education in foreign countries. The growth in Chinese students may also reflect a confluence of factors. First, more Chinese citizens are completing college and thus eligible to apply to graduate schools. Many schools have set up their gateway offices in China, i.e. Columbia University and Ohio State University. Meanwhile, new specialized master's programs appeal to students, particularly those from China, eager to delve deeper into a single subject and gain a credential to compete with the growing population of educated young adults, without taking much time out of the workforce (Ozturgut & Murphy, 2009; Yan, 2015; Albrecht, et al, 2012). Second, many U.S. schools are recruiting more aggressively overseas, marketing their programs to a wider talent pool. Word of mouth and social media then fuel the trend.

When looking into the Chinese applicants' backgrounds, many schools find some outstanding characteristics the Chinese applicants possess. First, they include China's best students who are probably aware that if they attend universities in China, they may not be able to go to the best universities in the world, as among top 100 universities around the world, only two Chinese universities, Tsinghua University ranked 36th place, and Peking University ranked 59th place by the U.S. News and World Report (*U.S. News and World Report*, 2019). Unlike U.S. universities that value candidates who present themselves as unique, their Chinese counterparts want students who excel on entrance exams that require years of rote learning and possess a strong grasp of math and science. Some critics say China's state-run education system — promoted as the hallmark of Communist meritocracy, as one can learn in the recent Fudan University's decision to remove Freedom of thought from its charter, causing concerns (Yu & Shepherd, 2019), in addition to bribes and corruptions. Such a system has broadened the gulf between the privileged and non-privileged classes. Third, these young applicants are ambitious and many want to go to Ivy League schools, a symbol for those parents who raise their children successfully. Fourth, they desire to learn more about critical thinking, and very importantly, they want to be exposed to things aside from just test taking (Taylor, 2012; Wu, 2014; Ruiz, 2014; Soria1 & Troisi, 2014).

Institute of International Education (IIE) published a report on reasons of the foreign students in the U.S. The report focuses on the following reasons:

1. Limited places available to study at (highly prestigious) universities in the home country;
2. Specialize in an area which is not offered in the home country;
3. Have access to specific laboratories/libraries not available/accessible in the home country;
4. Learn or improve knowledge of a foreign language;
5. Interest in foreign culture, history and landscape;
6. Get more practice-oriented education than offered in home country;
7. Possibility to build up networks/friendships in an intercultural context;
8. Improve career prospects/chances of getting a job in the home country;
9. Opportunity to develop the personality/become more independent;
10. Get a broader/more flexible education than offered in home country;
11. Experience new ways of thinking and acting in the field of study;
12. Improve chances for an international career (2016 Top Markets Report).

The IIE report on reasons is rather general. Other research focuses more on what graduate courses the Chinese students choose rather than why they choose United Kingdom as their destination (Zheng, 2010; Russell, et al, 2010; Wu, 2014).

The research work (Chao & Hegarty, 2014) focuses on the Chinese students' reasons for attending colleges in the U.S. Their results indicate that Chinese students are seeking education with a worldview and opt to break from the Chinese system of learning. Their study indicates choosing to study in the U.S. may be an academic endeavor, but the reasons behind the choices are not solely for academics. Due to its preliminary nature, it is questionable for generalization of the findings.

American businesses, management knowhow, and capital have been flowing to China for the past years since China opened its door in the early 1980s, but it is education that reverses the tide. The benefits of studying abroad are felt both by Chinese families and the whole country. For these reasons educators and researchers are interested in the motivations the Chinese students and families have for studying in the U.S. This research focuses in depth on the Chinese students' motivations for coming to the United States, so to provide some insights for educators and university administrators a better understanding of the Chinese students' reasons, therefore, serve this market segment better.

3. Methodology

With the focal questions in mind, this research explores Chinese students' motivations. A survey was developed to investigate the Chinese students' motivations: explore the accomplishments of these Chinese students and whether or not their expectations for coming to US business schools are met and what are not met. The following variables are developed from literature reviews.

3.1. Variable Selection

The following variables serve as accomplishments that Chinese students gain in their study in the U.S. from the literature review.

1. I can see the world and broaden my experience;
2. I can explore my heritage;
3. I can learn a language when being with native speakers;
4. I can improve my professional and financial potential;
5. I can gain new insights and outlooks through new relationships;
6. I can take control of my future;
7. It is easy to progress academically in American schools;
8. I can develop some skills that are not available in my home country;
9. I can earn a more valuable degree from an American school;
10. There are better quality programs in schools abroad;
11. It may enable me to stay abroad;
12. I can enjoy more freedom;
13. There is better technology, i.e. computers and network, abroad;
14. There are more inspiring programs in schools abroad;
15. Critical thinking is more emphasized overseas.

3.2. Sampling, hypothesis, and test of hypothesis

Due to the nature of this empirical study, the questionnaires were distributed to Chinese students enrolled in business majors in two large university campuses in America for a convenient sampling. The respondents were asked to evaluate the selected variables in a five-point Likert scale, with 5=mostly accomplished, 4=accomplished, 3=neutral, 2=not accomplished, and 1=not accomplished at all.

The hypotheses for this research are to find if there are any significant differences in the Chinese students' decisions for choosing to study in the U.S. rather than in China.

- H₁ There is no significant difference for Chinese students to see the world and broaden their experience, either in China or in the U.S.*
- H₂ There is no significant difference for Chinese students to explore their heritage, either in China or in the U.S.*
- H₃ There is no significant difference for Chinese students to learn English, either in China or in the U.S.*
- H₄ There is no significant difference for Chinese students to improve their professional and financial potential, either in China or in the U.S.*
- H₅ There is no significant difference for Chinese students to gain new insights and outlooks through new relationships, either in China or in the U.S.*
- H₆ There is no significant difference for Chinese students to take control of their future, either in China or in the U.S.*
- H₇ There is no significant difference for Chinese students to progress academically in schools, either in China or in the U.S.*
- H₈ There is no significant difference for Chinese students to develop skills, either in China or in the U.S.*
- H₉ There is no significant difference for Chinese students to earn a more valuable degree, either in China or in the U.S.*
- H₁₀ There is no significant difference for Chinese students to find better quality programs in schools, either in China or in the U.S.*
- H₁₁ There is no significant difference for Chinese students to remain, either in China or in the U.S. after graduation.*
- H₁₂ There is no significant difference for Chinese students to enjoy freedom, either in China or in the U.S.*
- H₁₃ There is no significant difference for Chinese students to enjoy better technology, i.e. computers and network, either in China or in the U.S.*
- H₁₄ There is no significant difference for Chinese students to have more inspiring programs in schools, either in China or in the U.S.*
- H₁₅ There is no significant difference for Chinese students to acquire more critical thinking in schools, either in China or in the U.S.*

Alternatively, there are significant differences in each of these hypotheses.

One sample Student's t-test is used to test the hypotheses. A t-test is any statistical hypothesis test in which the test statistic follows a Student's t distribution if the null hypothesis is supported. It is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic is known. The one sample t-test requires that the dependent variable follow a normal distribution. When the number of subjects in the experimental group is 30 or more, the central limit theorem shows a normal distribution can be assumed. If the number of subjects is less than 30, the researcher should plot the results and examine whether they appear to follow a normal distribution. If the distribution appears to be non-normal, and/or if the number of test cases is significantly less than 30, then a one sample median test, which does not require a normal distribution, should be used to test the hypothesis (Conover, 1980; Davis & Cosenza, 1985; Hamburg, 1977; SPSS^x, 2002; Wikipedia, 2012). Five percent of the t-Tests one tailed probability level was selected to signify the differences between preferences. When the scaling term is unknown and is replaced by an estimate based on the data, the test statistic (under certain conditions) follows a Student's t distribution. The estimate value for testing hypotheses in this study is 3, which is neutral.

4. Results

Three hundred ninety respondents were surveyed, with 137 completed responded for analyses, representing 35.1% of the total surveyed. Table 1 presents the general background information of the respondents.

Table 1: Backgrounds of the Respondents, in %.

Age	
<18	5.9
18-35	92.6
35-50	1.5
Gender	
Male	55.6
Female	44.4
Family annual income	
<US\$35k	31.3
US\$35-50k	25.4
US\$50-75k	14.9
>US\$75k	28.4
Current educational level	
College	65.2
master's	29.6
Doctoral	5.2
Marital status	
Married	8.9
Single	91.1
Major sources of financial support	
Parents	60
Own	19.3
scholarship or GA	20.7
Years studied in US	
<1 year	13.3
1 year	8.9
1-2 years	16.3
>2 years	61.5

It is noticeable that about 30% of the respondents who took the survey has an annual family income over US\$75K equivalent, and most of the students were born after 1978 when one child per family policy was initiated. In other words, these respondents had alternatives for their college selections: they could either study in China, or abroad. More than 60 percent of the respondents have already studied in the U.S. for over two years and therefore have had ample time to affirm their motivations for leaving China. It is also noticeable that 88.4% of respondents took Chinese college entry exam (Gaokao) in the top 50%, 100% stood at top 75% which means all these took university entrance exams can go to universities in China. Overwhelming majority believe business management, engineering, math and computer science majors offer better job opportunities in China, and US business education is better. Table 2 presents the test results of One-Sample *t*-Test, with mean differences, *t* values, degrees of freedom, and two tailed significances of these tests.

Table 2: One-Sample t-Test Results, test value=3, neutral

Variables	Mean	Mean Dif.	df	<i>t</i>	Sig. (2-tailed)
1. See the world and broaden my experience.	3.71	0.709	116	5.448	0.000
2. Explore my heritage	3.27	0.272	113	2.336	0.021
3. Learn a language when being with native speakers	3.61	0.609	114	5.064	0.000
4. Improve my professional and financial potential.	3.55	0.548	114	4.749	0.000
5. Gain new insights and outlooks through new relationships.	3.58	0.575	112	4.776	0.000
6. Take control of my future.	3.43	0.430	113	3.699	0.000
7. It is easy to progress academically in American schools.	3.08	0.080	112	0.667	0.506
8. I can develop some skills that are not available at home country.	3.35	0.348	111	2.883	0.005
9. I can earn a more valuable degree from an American school.	3.25	0.250	111	2.197	0.030
10. There are better quality programs in schools abroad.	3.43	0.434	112	3.599	0.000
11. It may enable you to stay abroad.	3.11	0.106	112	0.870	0.386
12. I can enjoy more freedom	3.35	0.351	113	2.920	0.004
13. There are better technology, i.e. computers and network abroad.	3.42	0.421	113	3.757	0.000
14. There are more inspiring programs in schools abroad.	3.35	0.345	112	3.000	0.003
15. Critical thinking is more emphasized overseas.	3.45	0.451	112	3.872	0.000

5. Managerial Implications and Recommendations

The test results of One-Sample t-Test reject thirteen null hypotheses as test significance are at or less than 5%:

1. See the world and broaden my experience.
2. Explore my heritage
3. Learn a language when being with native speakers
4. Improve my professional and financial potential.
5. Gain new insights and outlooks through new relationships.
6. Take control of my future.
8. I can develop some skills that are not available at home country.
9. I can earn a more valuable degree from an American school.
10. There are better quality programs in schools abroad.
12. I can enjoy more freedom
13. There are better technology, i.e. computers and network abroad.
14. There are more inspiring programs in schools abroad.
15. Critical thinking is more emphasized overseas.

In other words, these thirteen hypotheses present that the Chinese students have accomplished what they expect studying in US universities, so these hypotheses are rejected. Among these rejected hypotheses, the mean differences show **01. See the world and broaden my experience** and **03. Learn a language when being with native speakers** the highest positive values, which indicate that the respondents believe that they have accomplished more.

With regard to the other two hypotheses: **7. It is easy to progress academically in American schools, and 11. It may enable you to stay abroad**, the respondents' mean values are very close to the test value of 3.

The insignificances of these hypotheses suggest that these may not be the primary achievements the Chinese students expect in US schools, so these hypotheses are accepted.

What comes through from this research is that Chinese students try to achieve those that they may not be able to achieve in their home land. Cultural aspects and desires to gain a non-Chinese world perspective emerge as primary goals for study in the U.S. This may be due to the understanding and realization by the Chinese of a global economy and the need to understand the 'globalization' of business.

These goals could also be considered to be consistent with attitudes of all affluent middle class who have moved beyond daily sustenance and have achieved long term security. All universities have Missions and Visions, which encapsulate their goals and aspirations. More and more universities include international and global references into their mission and vision. Some universities go even further by referencing specific countries. For example, Hong Kong University's mission states that it should "serve as a focal point of intellectual and academic endeavor in China."

The authors have found that in some business majors the Chinese students count for over 60%, and such a growth trend will continue. Should educators use Chinese business cases instead of Western business cases is debatable, however, when professors have more knowledge of doing business in China can definitely help nurture the interests, not only for the Chinese students, but also for American and other international students.

6. Limitations and Future Research

While this study is limited by its size and confined to Chinese students studying at one university in the northeast United States, it does provide direction and insight for future research to build upon. The sample size can be accepted as a good representation of the decisions of Chinese students who wish to study in the U.S., as the northeast United States has a large number of Chinese students (as opposed to a state with very few Chinese students where such a sample would be non-representative). However, due to the limited sample size and issues addressed in this study, we believe that there are additional issues which need to be explored. Academic research on the decisions of international student populations (4.1% of the total U.S. college students), particularly Chinese students (about 1.2% of the total U.S. college students) in the U.S. is limited.

While much has been written in terms of their numbers and how universities are accommodating international students, there is limited empirical research on the understanding of 'why' Chinese students choose to study in the U.S. It is imperative in servicing this market segment that universities first understand the motivations behind the decision of these students, as only then can colleges and universities hope to build programs to cater to the long term facilitation of this segment.

Future empirical studies would continue to serve the advancement of knowledge in this area by increasing the sample size across numerous colleges, and broadening the scope by examining any differences in decisions in terms of public versus private colleges, and geographic location within the U.S.

A further recommendation would be to look at any major differences between undergraduate and graduate Chinese students, as well as differences between graduate Chinese who completed bachelor's degrees in the U.S. and those who didn't. A further investigation on the motivations of these students' parents is needed.

The growing number of Chinese students in the U.S. has raised some challenging questions for both educators and administrators. In the future, researchers will need to know more about the expectations these Chinese students have when they land in the U.S.

Whether these expectations are met during their studies or after their studies remain important questions for future investigations. If student expectations are not met, then educators in U.S. schools need to eliminate the gap between expectations and the actual perceptions by students. A demographic of this size cannot be ignored and needs to be understood, particularly since the trend is expected to continue well into the future.

References

- 2016 *Top Markets Reports Education*, US Department of Commerce, May 2016. Source: https://www.trade.gov/topmarkets/pdf/Education_Top_Markets_Report.pdf
- Albrecht, C., Malagueno, R. Holland, D., & Sanders, M. (2012). A Cross-Country Perspective on Professional Oversight, Education Standards and Countries' Perceived Level of Corruption, *Cross Cultural Management: An International Journal*, 19(4), 433-454.
- Chao, C. & Hegarty, N. (2014a). Driving Forces which Enthuse the Continuous Growth of Chinese Students in U.S. Colleges: A Preliminary Study on Chinese Students' Motives, *Journal of Academic Administration in Higher Education*, Fall, Vol. 10, Issue 2, pp. 27-34.
- Conover, W. J. (1980). *Practical Nonparametric Statistics*, 2nd ed. New York: John Wiley and Sons, pp. 213-337 and 344-384.
- Davis, D., & Cosenza, R. M. (1985). *Business Research for Decision Making*. Boston: Kent Publishing Company.

- Hamburg, M. (1977). *Statistical Analysis for Decision Making*, 2nd ed. New York: Harcourt Brace Jovanovich, Inc., pp. 219–538.
- IIE Report, 2019, Source: <https://www.iie.org/en/Why-IIE/Announcements/2019/11/Number-of-International-Students-in-the-United-States-Hits-All-Time-High>
- Joseph, F. (2012). Overseas colleges fight for Chinese students. *CNTV*, October 19.
- Meckler, L. & Korn, M. (2018). Visas Issued to Foreign Students Fall, Partly Due to Trump Immigration Policy, *the Wall Street Journal*, March 11, 2018. Retrieved from <https://www.wsj.com/articles/visas-issued-to-foreign-students-fall-partly-due-to-trump-immigration-policy-1520766000?mod=searchresults&page=1&pos=6>
- NAFSA Report, 2019. <https://www.nafsa.org/isev/reports/state?state=NY&year=2018>
- Ozturgut, O. & Murphy, C. (2009). “Literature vs. practice: challenges for international students in the U.S.,” *International Journal of Teaching and Learning in Higher Education*, vol. 22, no. 3, pp. 374–385.
- Ruiz, N. G. (2014). The Geography of Foreign Students in U.S. Higher Education: Origins and Destinations, Brookings, August 29. <http://www.brookings.edu/research/interactives/2014/geography-of-foreign-students#/M10420>
- Russell, J., Rosenthal, D. & Thomson, G. (2010). “The international student experience: three styles of adaptation,” *Higher Education*, vol. 60, no. 2, pp. 235–249.
- Soria1, K. M. & J. Troisi (2014) Internationalization at Home Alternatives to Study Abroad, *Journal of Studies in International Education*, July 1, 2014 18: 261-280
- SPSS[®], *Advanced Statistics*, 7.5. Chicago, IL: SPSS Inc. 2002.
- Yu, S. & Shepherd, C. (2019). Chinese universities’ Communist party tilt sparks student backlash, *Financial Times*, December 19, 2019
- Taylor, A. (2012). Three Reasons China's Students are Desperate to Study in America. *Business Insight*, October.
- U.S. News and World Report*, 2019. Source: <https://www.usnews.com/education/best-global-universities/rankings>
- WES Report: International trend in higher education, an Oxford Report, February 2015, Website: <https://www.ox.ac.uk/sites/files/oxford/International%20Trends%20in%20Higher%20Education%202015.pdf>;
- Wikipedia, 2012 http://en.wikipedia.org/wiki/Student's_t-test; Source: http://www-users.cs.umn.edu/~ludford/Stat_Guide/1_Sample_t.htm
- Wu, Q. (2014). Motivations and Decision-Making Processes of Mainland Chinese Students for Undertaking Master’s Programs Abroad, *Journal of Studies in International Education*, November. vol. 18 no. 5 pp. 426-444
- Yan, A. (2015). Why Chinese parents are sending their children abroad to study at a younger age, South China Morning Post, 25 March, 2015. Source: <http://www.scmp.com/news/china/article/1747075/why-mainland-parents-are-sending-their-children-abroad-study-younger-age?page=all>
- Zheng, X. (2010). “Re-interpreting silence: Chinese international students' verbal participation in U.S. universities,” *The International Journal of Learning*, vol. 17, no. 5, pp. 451–464, 2010.
- Zou, S (2019). Growth rate of Chinese studying in US falling, *China Daily*, November 21, 2019.