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Shao, Xiaorong, Allan Scherlen, Megan Johnson, Xu Xuan, Yaun Hu. 2013 "Chinese students in American academic libraries: A survey of Chinese user satisfaction with U.S. library experience." *The International Information & Library Review* 45:1–2. P. 28-36. (ISSN: 1057-2317) The versions of record is available from: <http://dx.doi.org/10.1016/j.iilr.2013.05.002>

Chinese Students in American Libraries: A Survey of Chinese User Satisfaction with U.S. Academic Library Experience

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Abstract

While scholarship has addressed issues around serving international students in U.S. libraries, until recently, relatively little attention has been directly focused upon the library needs of specific ethnic groups. This study surveys 83 Chinese students and scholars after they returned from studying at universities in the United States to measure and document their satisfaction with the library services and resources they used during their study abroad. Results of the survey are analyzed with the goal of benchmarking and improving services for this growing library user population in the United States.

Keywords: U.S. academic libraries; Chinese exchange students; Chinese scholars; Services; International students; Resources

Introduction/Background

Universities and colleges in the United States have seen a rapid increase in recent years in enrollment numbers of students from China. According to the Open Doors Data (Institution of International Education, 2012), there was a total of 764,495 international students from over two hundred countries studying in the United States in the 2011-2012 school year. Chinese students

increased in 2011-2012 to one-quarter of the international student population in the U.S. China, in fact, has led the world in sending students for higher education to the U.S. for three years in a row.

How to best serve Chinese students and help them adapt to the U.S. education system is of interest to everyone involved in higher education, including academic library professionals. One reason it is of interest to administrators in both higher education and government is that international students contribute more than \$21 billion to the U.S. economy (Institution of International Education, 2011), and higher education is among the United States' top service sector exports. But more importantly, serving students from abroad goes to the heart of the mission of modern librarianship classically espoused in the last of the Five Laws of Library Science by S. R. Ranganathan that suggested libraries must accommodate growth and change in patron use (Rubin, 2004). This mission is codified by the American Library Association's core values of librarianship in its commitment to value diversity and strive to reflect that diversity by providing a full spectrum of resources and services to the communities we serve (American Library Association, 2013).

This study looks at one segment of the international user population in the U.S. that librarians are seeking better to serve, namely, Chinese students and scholars. The study strives to gain insight into the Chinese student experience in the American library. It is hoped that the findings gathered will shed light on Chinese users' library needs. That input may not only help libraries develop strategies to improve resources and services for Chinese users but also to improve library services for all international users.

Literature Review

Challenges facing all ESL students in U.S. high education institutions

From a review of the literature, it is often noted that English as a Second Language (ESL) students generally face three major challenges in the American educational system: (1) language and communication, (2) adjustment to a new educational system, and (3) general cultural adjustments (Baron & Strout-Dapaz, 2001, p. 321). In addition, ESL students may be unaware of services available for them at the university library they are using in the U.S. In some cases, they may assume the library system in the U.S. is not much different from their home country. The early findings of Ball and Mahoney in 1987 noted that reserves, interlibrary loan, database searching, and term paper consultation did not exist in some international students' home countries (Ball & Mahoney, 1987, p. 162). Almost 20 years later, Jackson noted, "Services such as interlibrary loan, librarian reference-by-appointment, and live online reference are new concepts, whereas some library services and concepts such as the reference desk and open stacks are understood" (Jackson, 2005, p. 203). Other common U.S. library features unfamiliar to many international students include: the Library of Congress Book classification system, borrowing policies, electronic self-service, U.S. copyright policies, and the availability of librarians for research assistance.

Chinese students and language

The most cited barrier hindering library use by those of limited English proficiency is language (Conteh-Morgan, 2002, p.191). Chinese students, like most ESL students, have to pass

the Test of English as a Foreign Language (TOEFL) to attend a U.S. college or university. However, many of these students at the time they begin studying in the U.S. still lack adequate vocabulary including library terminology (Morrissey & Given, 2006, p. 223).

Chinese students often have better reading comprehension than oral language skills in English, since they usually have little opportunity in their home country to converse in English with native English speakers. The indirect consequence of these language barriers prevents them from taking full advantage of library services while in the U.S. even when they are aware the services exist. Mu recommends that when librarians work with international students they should avoid the use of slang, jargon or long complex sentences and should check often to be sure the student comprehends the instruction (Mu, 2007, p. 573).

Chinese students and cultural differences in education

In China, teaching is more lecture-based and textbook centered. For an example of the latter, Chinese college students seldom engage in course-related academic discussions or experiential learning activities either inside or outside the classroom. Assignments in China usually do not require students to do extensively reading beyond the textbook or to react to course learning by composing their own ideas in an essay form as is common in U.S. college courses. Learning in China is heavily driven by teachers' instruction as well as exams (Johnson, Shi, & Shao, 2010, p.188). Wang quotes a student as saying, "In China, one hundred percent of exam questions are from the textbook. Students in China, whether they are in engineering, science or the arts areas, are not required to write essays. They are required to write a thesis for graduation only" (Wang, 2006, p.86).

In Western countries, student-centered learning, where students are taught to be active participants in their learning, has been the norm for quite some time. In contrast, the Chinese educational model tends to place more emphasis on textbooks and rote learning (Dello-Iacovo, 2008, p. 245). This difference in educational approach explains some of the difficulties Chinese students have in adapting to the U.S. Educational system and to fully utilizing its libraries. But the approach to education in China is changing, with “su zhi jiao yu” reform starting in the 1990s. The phrase “Su zhi jiao yu” is frequently translated as “quality education” and generally refers to a more holistic style of education that, in China, is usually discussed as the antidote to the excesses of exam-oriented education (Dello-Iacovo, 2008, p. 241). However, most Chinese students coming to the United States to study will not have gone through an educational experience that rewards independent thinking skills and teamwork.

Studies relating specifically to Chinese students using libraries

Although there is little scholarly literature specific to serving Chinese students at U.S. academic libraries, several studies of Chinese students' experience in Western libraries have appeared in recent years. In 2006, Wang wrote a thesis on library services to Chinese students and faculty in New Zealand. She reports on an in-depth study with eight Chinese students, which looked at perceptions, experiences and expectations. She also gives an analysis of a 2005 study with a much larger pool of international and domestic respondents, where the total number of Chinese respondents was 299. She notes Chinese visitors perceive the library as a good place for study (p.83) and that participants are satisfied with library services, especially personal assistance (p.83). Liu and Winn (2009) conducted a pilot study of information seeking behaviors

of twelve Chinese graduate students at the University of Windsor in Canada and notes: “The characteristics of recent Chinese students are not only different from students from other countries, but also different from students from China in the 1980s and 1990s.” The differences they cite include levels of education, areas of study, English language proficiency, and amount of exposure to Western culture (Liu & Winn, 2009, p. 567).

Morrissey and Given conducted a case study at the University of Alberta in Canada of nine Chinese graduate students’ use of the library in regards to information literacy and conclude, “plagiarism, copyright, and appropriate citation strategies are areas where international students need targeted advice and support” (Morrissey & Given, 2006, p. 236). Another study that explores the information literacy (IL) needs of research students from China was undertaken by Han in Australia who notes in his literature review that most articles which examine the IL needs of international students consider non-domestic students as a “homogenous group based on the assumption that there is no difference in IL needs between research and coursework students” (Han, 2012, p. 4).

A review of the academic literature in China indicates that, like in the Western literature referenced above, there has been little study done on this and related topics. Two articles published during 1990s (Liu & Song, 1994; Liu, 1996) confirm that the difficulties encountered by students of China in their use of libraries in U.S. is mostly caused by unfamiliarity with the library system and open-stacks, uncertainty about library services, and language barriers. Recent studies by Chinese scholars (Wang, 2010; Yan, 2011) also indicate that Chinese students face problems adjusting to the academic community and social life on U.S. campuses. They further

note that female Chinese students tend to adapt more quickly to their new cultural surroundings than their male counterparts. Over time, however, this gender difference appears to diminish.

In addition, Chinese students come to the U.S. with very different experiences of libraries. Some libraries in China, for example, still use card catalogs. In other Chinese libraries students may have to pay to use computers or they may have limited access to library databases or library services (Wang, 2010; Yan, 2011). Therefore, Chinese students may arrive at their academic library in the United States unaware of such common university library amenities as reference service and instruction programs.

Purposes of the Study

The purpose of this study is to document Chinese students and scholars' experiences with academic library services and resources when they were studying in the U.S. and gather their opinion on ways the U.S. library they visited could be improved. It is hoped that the findings from this study can help academic libraries in the U.S. better understand the needs of Chinese students and scholars and thus better serve this user population. It is also hoped that the findings of this study will serve as a foundation for developing strategies to improve services and resources for Chinese users and to better integrate them into the U.S. academic community. These strategies can serve as a starting point for considering the particular needs and interests of other international students and scholars as well.

Methods and Procedures

Survey instrument development

A written survey was developed based on a literature review of other studies and the researchers' experiences with academic libraries in both countries. The survey instrument was first written in English (the researchers' mutual language) and then translated into Chinese. In this study, use of the term "Chinese language" implies Mandarin. The survey was composed of 15 questions, given in detail in the Findings/Results section. The questions cover the participant's length of visit, their English language skills, and their experience with U.S. academic libraries. The survey instrument ends with an open-ended question inviting additional thoughts from the respondents. After the survey instrument was pilot tested with several students at Fudan University in China, minor revisions were made.

Data collection and analysis

Data was collected with an online survey. Librarians at Fudan University, Shaanxi Normal University, and Beijing International Studies University administered the survey at their respective institutions. These librarians each contacted approximately 25 to 35 students and faculty who had recently studied at a U.S. university. The survey included an introduction, which explained the purpose of the study, stated participation was voluntary and anonymous, and that the identity of participants would not be disclosed. Surveys at all three universities were completed within four weeks of its distribution in April and May of 2012.

Survey data were analyzed using the Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistics were employed to summarize the data. The qualitative data collected from open-ended questions, interviews and observations were incorporated into the paper where appropriate.

Findings/Results

The total number of respondents was 88, and five responses were unusable because they were incomplete. Thus usable data came from 83 respondents. The results are summarized below by question. In the analysis, N represents the number of respondents.

1. How long were you at a university in the U.S.?

Table 1 shows lengths of time the participants stayed at a U.S. university. One third of the respondents (N=27) were at a U.S. university one to three months. One third (N=27) visited for about a semester; or four to six months. One third (N=29) reported they stayed between seven months to over a year.

Table 1.

Duration at a U.S. university.

Answer options	Response	
	Percent	<i>N</i>
Less than one month	21.7%	18
One to three months	10.8%	9
Four to six months	32.5%	27
Seven months to one year	20.5%	17
Over one year	14.5%	12
<i>Total</i>	100%	83

2. Rate your English language fluency when you were in the U.S.

Table 2.

English language skills.

Answer options	Response	
	Percent	<i>N</i>
Fluent – close to same fluency of native	22.7%	18
Usually very good writing and speaking skills – sometimes need to find words	53.0%	44
Functional writing and speaking skills	21.6%	18
Beginning writing and speaking skills	3.6%	3
<i>Total</i>	100%	83

Table 2 presents the results of respondents’ self-reported English language fluency at the time when he or she was an exchange student or a visiting scholar in the U.S. Almost all (96.4%) reported they had at least functional writing and speaking skills in English skill. A small percentage (3.6%, N=3) indicated they had “beginning writing and speaking skills.”

3. What was your level of study when you were at the U.S. university?

When asked their level of study at the U.S. university, about a quarter (N=22) reported as undergraduates, a third were graduate students (N=30), and 36.2% (N=30) reported they were visiting scholars. A small percentage 3.6% (N=3) said they were not officially at a specific level, and a small percentage did not answer this question.

Table 3.

Level of program studies.

Answer options	Response	
	Percent	<i>N</i>
Freshman	0.0%	0
Sophomore	7.2%	6
Junior	19.2%	16
Senior	0.0%	0
Graduate student	30.2%	25
Visiting scholar	36.2%	30
Not officially at a specific level	3.6%	3
Missing (did not respond)	3.6%	3
<i>Total</i>	100%	83

4. Describe or list your major subject area(s) of study when you were at the university in the U.S.

Due to a technical problem, only 22 participants out of 83 were able to respond to this question. Among the respondents, one was majoring in natural science-chemistry, and the rest either in business, social science or linguistics.

5. When you arrived at the university in the U.S. were you taken to visit the library?

When asked if they were taken to visit the library after they arrived at the university, the majority (75.9%, N=63) said “yes” while about a quarter (22.9%) said “no.” One person chose “I do not know.” This response indicates that three quarters of the U.S. academic libraries are bringing Chinese students and scholars to the library, which is a positive indicator.

6. Were you offered a special library instruction session (for students from other countries) to introduce you to the library’s collections and electronic resources?

When asked that if the library offered a special library instruction session for international students to learn about the library collections and electronic resources, 53 (63.8%) responded to the question with “yes” while 18 (21.7%) said “no,” and 12 (14.5%) indicated they did not know. This response indicates that most (63.8%) of the U.S. academic libraries received a library instruction session, which is a positive indicator.

7. Were you offered the service of a librarian who specialized in helping library users from China?

When asked whether or not they were helped by a librarian who specialized in helping users from China, half (N=42) said “no.” Almost a quarter of respondents (24.4%, N=20) chose either “yes” or “I do not know.” This response indicates that few of the Chinese students or scholars knew if the library had a Chinese Specialist, which is a negative indicator. See implications below for suggestions.

8. Did the library have signs in languages other than English?

For the non-English language sign question, 48.2% (N=40) indicated the library did not have multi-lingual signage, while 28.9% (N=24) said the library had signs in other languages. Another 22.9% of respondents (N=19) chose “I don’t know.”

9. Did the library provide a Chinese language version of the library website?

When asked if the library had a Chinese version of the library website, almost three quarters (73.5%, N=61) said the library did not have a Chinese language website while 8.4% (N=7) said the library had a Chinese language website. Another 18.1% (N=15) of respondents chose “I don’t know.” This indicates that very few U.S. academic libraries encountered by the respondents are providing a Chinese language version of the resources and services.

10. Did the library offer any user help materials in Chinese to explain the library’s services or to clarify its resources for research?

When asked if the library offered any user help materials in Chinese, 57.8% (N=48) of participants said “no” while 22.9% (N=19) chose “yes.” The rest (19.3%, N=16) indicated they did not know. Only a fifth of the libraries in this sample offered help materials in Chinese, an area that could be strengthened.

11. Did the library feel welcoming to you?

When asked if they felt welcomed in the library, almost all of respondents 86.7% (N=72) said “yes,” while no respondent chose “no” and 13.3% (N=11) indicated they did not know.

12. Did you use the library resources/facilities for the following personal purposes?

Question 12 asked participants what resources were most useful and participants could choose multiple responses. Table 4 shows 239 selections of usage. A majority of these (69%, N=165) reported using the library for the last four options, which are all related to personal use. A little less than a third (31%, N=74) also selected “to read, download, and/or print reserves or other class-related materials.”

Table 4.

Purposes of library use.

Answer options	Responses	
	Percent	<i>N</i>
To read, download, and/or print reserves or other class-related materials	31%	74
Personal web use (to check flight times, look at websites, etc.)	23.9%	57
E-mail	22.1%	53
To read for personal interest or pleasure, watch videos, or listen to music	16.3%	39
To meet with friends	6.7%	16
<i>Total</i>	100%	239

13. How often did you use the library for your studies while you were at the university in the U.S.?

Table 5 shows the participants' frequencies of the library use. The majority of participants (74.3%, N=70) said they used the library at least once a week, and 60.3% used the library often.

Four participants reported that they did not use the library during their time at a U.S. university. Two indicated they did not need to use the library for their activities at the university and another two indicated they did not think about using the library. However, these four respondents chose to answer other questions in the survey, such as the question, "What library resources and/or services did the library have that were most useful? Please choose two most

important things you think library can do to make library research easier and improve the overall experience for Chinese students” It is therefore valid to include their responses.

Table 5.

Frequency of library use by participants.

Answer options	Response	
	Percent	<i>N</i>
Often (daily or several times a week)	60.3%	50
Occasionally (once a week or several times a month)	24%	20
Just a few times	9.7%	8
Once	1.2%	1
Never or missing	4.8%	4
<i>Total</i>	100%	83

14a. What library resources and/or services did the library have that were most useful?

Question 14a asked participants what resources were most useful and participants could choose multiple responses. A total of 289 responses were received. The most useful resources (45.8%) reported were English language resources (books and databases). Study space (19%, N=55) and Internet access were valued” (17%, N=49). A relatively small percentage of participants (8.3%) ranked “a librarian who was available and understood my needs” as useful. Chinese exchange students and scholars appear to be like their American counterparts in not understanding that librarians can be very helpful in learning to access quality resources.

These participants did not rate in Chinese language materials, a website in Chinese, or a help materials in Chinese as particularly helpful so perhaps librarians do not need to invest energy in creating these resources.

Table 6.

Most useful resources at the US library.

Answer options	Responses	
	Percent	<i>N</i>
English language books	24.3%	70
Electronic databases in English	21.5%	62
Library space to study	19%	55
Computer access to the internet	17%	49
A librarian who was available and understood my needs	8.3%	24
Chinese language books	4.1%	12
Chinese language users help materials on library collections, databases, or services.	2.5%	7
Electronic databases in Chinese	2%	6
Chinese language version of the library website	1.3%	4
<i>Total</i>	100.0%	289

15. Please choose two most important things you think library can do to make library research easier and improve the overall experience for Chinese students.

Table 7 shows the results from multiple response analysis for question 15 which asked the participants to choose two important things they wanted the library to do to improve the

Chinese student experience. “Providing a multicultural service desk or office where Chinese students know they can go for research assistance” was the top rated item (31.6%, N=50) among seven items, followed by “Providing a librarian who is readily available and understands Chinese” (18.4%, N=29).

Table 7.

Please choose two most important things you think library can do to make research easier and improve the overall experience for Chinese students.

Answer options	Responses	
	Percent	<i>N</i>
Providing a multicultural service desk or office where Chinese students know they can go for research assistance	31.6%	50
Providing a librarian who is readily available and understands Chinese	18.4%	29
Access to more Chinese language academic materials such as books and/or journals in my subject of interest	15.8%	25
Print library user guides in Chinese	13.2%	21
Library website in Chinese	12%	19
Access to other Chinese language materials such as movies, newspapers and/or magazines	8%	12
<i>Total</i>	100.0%	158

Question 15 also had a fill in the blank section for “other.” In this space, three respondents indicated Chinese students should not be offered any assistance in Mandarin in the

form of printed or online library research guides, or librarians fluent in Mandarin, as one of the goals for studying in the U.S. is to learn English.

The last section of the survey was open ended, and invited participants to give any additional thoughts about their experience in an U.S, academic library and offer any other comments. Several indicated they liked group study rooms, interlibrary loan and laptop checkout service. Some noticed library personnel were congenial and friendly and willing to help. One said it was good that the materials and reading areas were mingled, which is unlike most Chinese libraries where reading rooms are separated from the stacks. Some noted the relative luxury of American libraries while others saw the need for libraries to be larger, have more resources and be open for longer hours. Clearly, the survey participants had different experiences in different types of institutions. Two participants offered their comments on the survey. One thought it was a good study overall, and another suggested more technical and service questions should be included.

Correlation coefficients

Correlation is a statistical technique that can show whether and how strongly pairs of variables are related. The result of a correlation is called the correlation coefficient (or “r”). It ranges from -1.0 to +1.0. The closer r is to +1 or -1, the more closely the two variables are related (Creative Research Systems, 2013).

Kendall’s tau-b correlation coefficients (Table 8) were computed to examine if there was any association between the participants’ length of studies, level of English skills and level of

program studies with how often they used the library. The results showed that length of their time at a U.S. university was not associated with the frequencies of their library use. The participants' English skills ($p=0.068$) and the level of their program studies ($p=0.056$) were not statistically significant with how often they used the library, however, the p -values were just slightly higher than 0.05 which is the statistically significant level set for a study such as this.

Table 8.

Kendall's tau-b correlation coefficients.

		Length of studies (Q#1)	Level of English skills (Q#2)	Level of program studies (Q#3)
Q#13: How often did you use the library?	Correlation Coefficient	-0.121	0.182	0.190
	Sig. (2-tailed)	0.205	0.068	0.056
	<i>N</i>	82	82	79

$p < 0.05$.

Conclusions

The results from the study showed that one third of participants studied at a U.S. university for one semester (four to six months) and slightly over half of them reported they had very good English writing and speaking skills while they were in the U.S. About one third were graduate students and another one third were visiting scholars. Our data did not reveal an association between the length of participants' time at a U.S. university or their English language

proficiency and the frequencies of their use of library. The results do indicate, not surprisingly, that students or scholars from China who were more advanced in their studies were more likely to use the library.

It is noteworthy that the study did not include undergraduate freshmen or seniors. Informal discussions with librarians in China suggested that neither freshmen nor seniors are generally encouraged to go abroad. But these demographics are more granular than many of the studies reviewed; most studies note the rank of undergraduates, graduate or visiting scholars and do not specify the academic level of the undergraduate students.

Concerning questions related to visiting and receiving instruction at a U.S. library, the majority agreed that they were taken to visit the library and introduced to the library collections and databases at the beginning of their time at the university. Regarding the questions that inquired about targeted services for Chinese users at the U.S. library, such as librarians knowledgeable in Chinese language, signage in Chinese, a Chinese language website, or Chinese user help guides, approximately half of participants indicated encountering no such services at the U.S. library where they studied. Over 60% went to the library on a daily basis and most of them used the library to read, download, and/or print reserves or other class-related materials. A majority found English materials to be the most useful resources while a very small number of respondents thought the Chinese language materials were most useful. Around one third found “a librarian who was available and understood my needs” most useful. The two items rated highest by participants for making their research easier and their library experience more pleasant were the provision of a multicultural service office and access to a librarian who understands Chinese.

Implications and Recommendations

Universities in the United States and China are continuing to build exchange agreements and create incentives for drawing more students and faculty from partner institutions to study and teach. Libraries of those institutions are looking for innovative approaches to better serve this important user population. It is the hope of the authors that studies in this area will continue to build upon their work and unveil newer solutions as people, policies, and technology change with time.

Academic libraries in the U.S. strive to create a user-centered, comfortable place with good service. Many score well in the international benchmark studies like LibQual+ in “Library as a place.” This study supports this research in that 86.7% of respondents felt welcome at the library. The results of this study and others studies indicate Chinese students appear to like to use the library for studying but are often not aware of the role of the reference librarian. In Liu and Winn’s study, participants were asked about their experiences with reference help. A typical answer was “no such thing in China.” Most said they thought the role of the librarian in China was to maintain collections (Liu & Winn, 2009, p. 589). The present study supports that part of the orientation for visiting Chinese students and scholars should be to clearly explain the role of the reference librarians. In this study sample, only 24% of the respondents knew if the library had a Chinese Specialist. Library outreach in this area could be improved. Every academic library may not be lucky enough to have a librarian fluent in Mandarin, but libraries can appoint liaisons to become better attuned to the needs of Chinese users.

When asked to choose two important things they wanted the library to do to improve the Chinese student experience. “Providing a multicultural service desk or office where Chinese students know they can go for research assistance” and “Providing a librarian who is readily available and understands Chinese” were ranked as most important. Kumar and Suresh’s research supports this conclusion; these authors listed the needs of international students to include specialized instruction; the need for an international student’s library liaison; and helping library personnel understand other cultures (Kumar & Suresh, 2000, p. 335).

The needs of Chinese students, who are a significantly growing segment of the users of U.S. academic libraries, are evolving. Therefore, continued studies for better ways to serve this user population are essential. Among the refinements to library service that could be done, the authors of this study see four main areas of improvement to help students and scholars from China maximize their use of the library when in the U.S.

1. Staffing the library with diverse librarians

This study shows that “providing a multicultural service desk or office where Chinese students know they can go for research assistance” was highly valued, as was “providing a librarian who is readily available and understands Chinese.” Thus, staffing the library with people who are interested in helping Chinese students is a good start toward reaching that goal. Librarians with a multicultural background (ex. originating from another country or having lived abroad) who demonstrate compassion for the obstacles scholars encounter in a foreign country can be recruited to further improve service for international students and scholars.

2. Developing resource guides in Chinese and other languages

This study's respondents did not express a strong need for signs in their native language, but they did express a lack of awareness of library services which signage could help. Only 8% of the academic libraries in this sample had a Chinese language website. Table 6 presents the results of "most useful resources" reported by respondents, and 1.3% of respondents indicated that "a Chinese language version of the library website" was most useful to them. This seems like a low response rate, but given that only 8% of libraries offer a Chinese version of their resources, it may be "low hanging fruit" to offer at least a basic outline of library resources in the Chinese language. Since information about the library is constantly changing, a basic web page would probably be easier to keep updated than print options.

3. Developing and refining library orientation for Chinese students

This study and several others in recent years have noted that the library is viewed by Chinese students as a good place for study and that participants are satisfied with library services, especially personal assistance (Wang, p.83). However, satisfaction with the library is not synonymous with being capable of using library resources fully. It is important that Chinese students receive targeted instruction in regards to understanding reference and other user services, methods for discipline specific citation of works used to avoid charges of plagiarism, and, like all library patrons, help in how to efficiently use library databases.

4. Developing practical tips for Chinese student preparing to travel to the U.S.

A review of the academic literature in China confirms that the difficulties encountered by students of China in their use of libraries in U.S. can be attributed to unfamiliarity with the

library system and open-stacks, uncertainty about library services, and language barriers. Chen and Liu in 2005 wrote a short paper listing ten practical things to “know before you go” for Westerners going to visit Chinese libraries (Chen & Liu, 2005, p. 125). A similar type web-guide could be designed for Chinese students and scholars to consult before leaving their homeland. The guide could be incorporated into the training programs provided by their home institutions as part of their preparation for studying abroad. Such a guide would help prepare Chinese students anticipate adjustments to the academic community and social life on U.S. campuses. It could cover such basics as of how academic libraries are arranged, the role of the reference librarian, citing information according to western standards, seeking assistance in the writing center, and other general but encouraging information about the U.S. academic library and using its resource. The guide may be specific to a particular partner institution or written more generally to be useful across a range of U.S. libraries.

Further Research

This study built upon research of those who have studied academic library service to international or ESL students, scholar and faculty. In particular, it follows the work of those who have studied service relating specifically to Chinese students using academic libraries, including previous papers by the authors of this study. This study had a large population sample in comparison to some earlier studies. For example, Wang’s 2006 thesis had eight students (she also reports on a 2005 study with a much larger population) and her results are confirmed in this study. She notes Chinese visitors perceive the library as a good place for study and that participants are generally satisfied with library services, especially personal assistance, which

this study also found. Liu and Winn's 2009 study had a population sample of twelve Chinese graduate students, and Morrissey and Given (2006) conducted a case study at the University of Alberta in Canada of nine Chinese graduate students. This study includes not only a larger sample size but also includes undergraduate students, which will be of interest to libraries seeking to serve Chinese undergraduates.

This study presents several suggestions based on the findings to better serve visiting Chinese students and scholars, including developing resource guides in Chinese; refining library orientation and developing a website with practical tips for Chinese student preparing to travel to the U.S. Monitoring the results of these initiatives can help determine if these strategies have a positive impact on Chinese students' and scholars' satisfaction and experience with U.S. academic libraries. The authors call for further research to contrast the frequency and purpose of library usage between Chinese students and the domestic student population at American universities. It will be also be of interest to further examine the differences between how Chinese and other international students use the library and if various groups will benefit from targeted orientation and/or instruction.

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