# Chinese Academic Libraries Serving International Students and Scholars: A Three-case Assessment

**Xiaorong Shao & Allan Scherlen**

**ABSTRACT**

The authors of this study assess the attitudes and perceptions of academic librarians at three university libraries in China regarding library services for international students and scholars. The study directs particular focus on librarians at Shaanxi Normal University in Xi'an, Fudan University in Shanghai, and Wuhan University of Technology, China, and follows logically upon a study conducted in 2008 that explored the perceptions of international students at two Chinese universities regarding the effectiveness of library services and collections for their research needs. In particular, this study documents information about Chinese academic librarian perceptions regarding services for international students and attitudes toward future outcomes. The ultimate goal of the study is to lay a foundation for developing strategies for improving library services and resources for international students and scholars in Chinese academic libraries in particular which in turn can serve to improve services for international students world-wide. The results support the assumption that academic librarians in China are strongly interested in improving services for international students and scholars while continuing to face challenges and trying to find ways to fulfill the information needs of international students and scholars.

**Keywords:** International students; University libraries; Academic librarians; Library services; China.

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# ARTICLE

## Introduction

Universities in China have seen a steady growth in their number of international students and scholars since China initiated reforms and expanded student exchanges in the late 1970s. By 2007 over 195,000 international students from 188 countries and regions came to study in China, enrolling in 544 universities and educational institutions. Of this number over 7,000 came from the United States (People's Daily, 2008, Fan, 2009). Meanwhile, the number of foreign student in the United States also continued to increase.[1] Over 670,000 international students attended U.S. colleges and universities during the 2008-2009 academic year, with 98,235 of those students originating from China (Fischer, 2009). University librarians in both the United States and China began to realize the need for a coordinated effort in both countries to address the special research needs of visiting student and faculty populations.

A major step in the direction of serving this growing constituency is to first assess how library administrators, faculty, and staff members in both regions regard the challenge of international users in their libraries. The aim of this study of librarian perceptions and attitudes seeks to determine how librarians in China regard various aspects of serving international students and scholars. Undergoing an investigation of librarian perceptions follows logically upon a study that explored the perceptions of international students at two Chinese universities regarding the effectiveness of library services and collections for their research needs (Jiao, Zhuo, Zhou & Zhou, 2008). Such ongoing studies, it is hoped, will help to better understand how to integrate this growing constituency into the Chinese academic library user community. The investigators of this study focus on the perceptions of librarians at three university libraries in China: Fudan University in Shanghai, Shaanxi Normal University in Xi'an, and Wuhan University of Technology in Wuhan.

The genesis of this study arose in 2008 when the authors, Xiaorong Shao and Allan Scherlen, traveled with a delegation of librarians from Appalachian State University to China to discuss developing a librarian exchange and collaboration agreement with librarians at Fudan University, a prestigious comprehensive university. Consequently, a formal library exchange agreement was signed with Fudan University in Shanghai. During that 2008 trip, the researchers also visited Shaanxi Normal University, which has a curricular focus on the discipline of education, and discovered that librarians at Shaanxi Normal University had an interest in and need for developing services for foreign library users. After visiting those two universities, the researchers decided to include a third institution, Wuhan University of

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Technology, in order to add more disciplinary diversity to the study: Wuhan University of Technology differs from the other two in that it focuses more on technology and engineering programs rather than the traditional academic disciplines and it also has a substantial though smaller number of international students and scholars.

Table 1 presents the number of students, library personnel, and international students and scholars at each university examined in this study as well as the students' country of origin. The data were extracted from the survey for the library administrators distributed in January 2010. The table shows Fudan which serves the fewest overall number of students has far more international students than the other two. Wuhan, in contrast, with almost three times the number of students has only one-tenth of the number of international students as Fudan while roughly paralleling it in the number of foreign scholars. Shaanxi fits between them in the number of overall students and number of international students but has fewer foreign scholars and librarians than the other two.

**Table 1. Number of students, library personnel and international students and scholars**

| Number of… | Fudan University | Shaanxi Normal University | Wuhan University of Technology |
|---|---|---|---|
| Undergraduate Students | 13,574 | 18,000 | 34,901 |
| Graduate Students | 12,736 | 7,200 | 8,271 |
| International Students (Countries of Origin) | 3,443 (South Korea, Japan, U.S. Singapore ) | 812 (South Korea, Kazakhstan, U.S. etc.) | 355 (Africa, Asia, etc.) |
| International Scholars (Countries of Origin) | 101 (long-term)** 580 (short-term)* (U.S., Canada, U.K., France, Germany, Sweden, Australia, Japan, South Korea, Singapore, etc.) | 123 in total (U.S., South Korea , Canada, etc.) | 18 (long-term)** 400 (short-term)* (U.S., U.K., Japan, France, Australia, Russia, Netherlands, etc.) |
| Library Personal (Librarians) | 207 (101) | 145 (79) | 189 (131) |

Note. *Short-term visit=1 to 30 days, **Long-term visit>30 days

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## Literature Review

The urgency to address the information needs of international students for services has resulted in an emerging literature on the topic in recent years. Within the professional library literature in English, there is a large body of scholarship that has focused on services within predominately English-speaking university libraries for users whose native language is not English (Allen, 1993; Baron & Strout-Papaz, 2001; Brown, 2001). These papers have investigated or discussed various aspects of service for international students ranging from improvement of bibliographic instruction, reference assistance, resource accessibility, marketing, and outreach. For example, in 1993, researchers surveyed foreign students at the University of Toledo in Ohio to better understand their library service needs and to improve bibliographic instruction for these students (Garcha & Russell, 1993). In 2000, Kumar and Suresh noted that reference librarians play a key role in assuring that international students are successful (Kumar & Suresh, 2000). In 2001, Baron and Strout-Dapaz determined from a thorough review of the literature to that time that the literature "supports libraries taking an active role with international students, regardless of a formalized instructional program or the number of international students." The two dominant "themes" of the literature in the nineties, they argued, were institutionally focused: the importance of staff training and collaboration among departments. They also discovered in the literature emerging interest in other issues such as the value of outreach to international students, the effect of specialized orientation sessions, and usefulness of ethnic diversity [with language skills] within the library (Baron & Strout-Dapaz, p. 318). In 2002, librarians in Oregon described how in the "Helping Hand Project" they translated a two-page library handout into fourteen languages (Chau, 2003). In 2003, researchers conducted a survey of incoming international students at San Jose State University and found that international students are far more information literate than librarians had expected but will generally benefit from librarians possessing improved intercultural communication skills and from library services directly designed for international students (Jackson, 2005). In 2006, a case study examined the success of Chinese graduate students in navigating and utilizing library resources at the University of Alberta Library (Morrissey & Given, 2006). In 2007, researchers interviewed Asian international students at the University of Canterbury in New Zealand and determined that library information services must be specially marketed to international students to make them feel comfortable about using the library (Mu, 2007). Most recently, librarians at the University of Tennessee conducted a research project to explore how ethnic minority groups and international students perceived and made use of library services (Puente, Grey & Agnew, 2009). Finally, Yunshan Ye argued in an introduction to other papers on outreach to international students that not all international students are alike and cannot be addressed as a generic group as each have unique needs and must be addressed as individuals (Ye, 2009).

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In contrast to this growing body of literature addressing services for international students in English-speaking academic libraries, there is far less literature to date regarding library services for non-Chinese-speaking users at Chinese academic libraries. One Chinese article by Ning and Liu in 1994 indicated that academic libraries in China at that time started to notice a need to serve foreign users. The authors listed unique difficulties non-Chinese speakers encountered when using libraries; problems that were mostly due to language barriers and unfamiliarity with Chinese library indexing and classification systems (Ning & Liu, 1994).

Entering the 2000s, there were more discussions among Chinese academic librarians regarding service for international students and scholars. Academic librarians Zhang and Wang in 2004 reflected on the problems facing Chinese academic libraries in meeting the information needs of international users (Zhange & Wang, 2004). According to Zhang and Wang (2004), lack of policy framework, quality librarians and resources were major setbacks for academic libraries in serving the campus international community. Those problems were confirmed by Zhao in 2007. Zhao suggested several strategies to remedy the situation, one of which was for academic libraries to focus on setting a high priority on serving international users in order to integrate them into the Chinese academic community (Zhao, 2007).

Gong and Gorman in 2000 provided the English speaking world with a history and overview of library services in China that can be helpful in understanding librarianship in China but only indirectly addresses services of international users by describing how Chinese libraries have increasingly trained librarians overseas, invited overseas experts to lecture at Chinese libraries, and improved cooperation with information professionals outside China. The authors also generally called for more "user-friendly" services in Chinese libraries. But noticeably absent from the monograph was a discussion of services for foreign users. In 2001, Chu outlined the growing influence of Western librarianship in China from the 1980s upon such areas as "basic theories, technical services, reader's services, management and library science education" (Chu, 2001). This strong interest among Chinese librarians to modernize libraries along North American and European models – though not discussed by Chu-- leads logically to present Chinese interests in providing user services for international students. Jing Liao in 2004 took a historical retrospective look at traditional library culture in Chinese academic libraries as a root cause of underdevelopment of user services in those libraries (Liao, 2004) but again, the author did not directly address the needs of international users.

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It was not until 2008, in an important study conducted at Wuhan and Beijing universities, international students were surveyed about their experiences with library services. The study concluded with practical suggestions that arose from both the formal survey and comments from the students for improving library services for this constituency such as improving the electronic interfaces for locating materials, improving interlibrary loan services, and improving staff skills in dealing with international students, to name a few (Jiao, Zhuo, Zhou & Zhou, 2008). More recently, Aihong Fan (2009) examined how the library at Qinghua University in Beijing studied and then addressed issues related to services for international students at her institution. Fan found librarians could help foreign students in four primary areas: providing bilingual signs and web interfaces, providing foreign students with special instruction and orientation, providing English language electronic resources, and encouraging greater competency of English among their librarians.

From a review of the literature available in English the conclusions that Baron and Strout-Dapaz made in 2001 continue to hold that international students face three major challenges: "language and communication, adjustment to a new educational and library system, and general cultural adjustment" (Baron & Strout-Dapaz, p. 321). It is further apparent from an examination of the literature on this topic that more attention is called for to assess the needs of international students using Chinese academic libraries. Some preliminary areas to assess are the perceptions and attitudes of librarians in Chinese academic libraries on issues related to this topic. Do the librarians and their administrators in Chinese Universities perceive a need for special library services for international students and scholars? If they do see such a need, how are they addressing this challenge? If not, why not?

This research project attempted to begin such an assessment focusing on three libraries and anticipates being foundational for later more comprehensive examinations. The study was motivated by the premise that a systematic reflection by Chinese academic librarians upon the results of such surveys and interviews may help them to better understand where they are in the process of improving services and resources for international students and scholars. An immediate benefit hoped for by the researchers was the professional acknowledgement by librarians of the issues around developing services for international users. Such awareness may then lead to efforts to develop specific strategies for improving services and resources for international users. The long-term outcome hoped for was improved services and resources for international scholars and students both in China and elsewhere, and stronger connections between academic libraries and their local international community.

## Purposes and Objectives

The purpose of the study is to explore librarians' perceptions of services and resources for international scholars and students in Chinese academic libraries, and to discover their attitudes regarding the integration of international scholars and students into their library community. The objectives are to:

- Describe the physical environment of each participating library with regard to international users;
- Describe each surveyed library with regard to international diversity within its collection;
- Document the library's current services for international scholars and students;
- Describe the librarians' perception/awareness about serving international scholars and students;
- Determine the factors that contribute to integrating international scholars and students into the academic library community; and
- Discuss the strategies each anticipates for improving library services for international scholars and students.

## Methodologies and Procedures

The investigators chose to focus their study on administrators and library staff of three university libraries in China: Fudan University in Shanghai, Shaanxi Normal University in Xi'an and Wuhan University of Technology in Wuhan. Before beginning the study, the investigators completed the necessary process for approval of the study by the institutional review board of Appalachian State University.

### Instrument design and testing

Two separate written surveys were employed to collect data from library administers as well as librarians. Both survey instruments were first written in English--the researchers' mutual language—but then translated into Chinese—the language of the subjects investigated. The instruments were developed based on issues discovered during an extensive literature review related to library services

for international students and upon the researchers' experience with both library systems. The instruments were validated by informal discussions with librarians in the U.S. and China. Minor revisions were made to the instruments after these discussions.

The survey for library administrators was intended to gather the demographic information about the universities' international students and scholars as well as the current status of library services, collections and physical environment for international users.

The survey for librarians was intended to explore the librarian practitioners' perceptions regarding services for international scholars and students, and at the same time sought to determine the important factors that contribute to better integration of international scholars and students into the Chinese academic library community.

The survey for librarians was composed of two parts of nine and ten questions respectively followed by an open-ended question where participants could add additional comments. The first part queried participants about their degree of agreement regarding their current library services for international students followed by the second which asked about their individual interest in the degree of importance regarding potential future library services for international users. Five-point Likert scales were used to measure the questions.

Reliability for the survey of librarians was established through a pilot study with 10 respondents from eight university libraries in China. The reliability of the Cronbach's coefficient alpha for the two parts was 0.85 and 0.62 respectively. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. Alpha coefficient ranges in value from 0 to 1 (Santos, 1999).

**Data Collection**

The population for this study was reference and collection management librarians at three Chinese university libraries. A sample of 10 to 20 librarians, depending on the number of personnel in general as well as the number of reference and collection management librarians in particular at each of the participating libraries, was randomly selected to complete the survey for librarians. The number of librarians working at each institution was: 101 at Fudan University, 79 at Shaanxi Normal University, and 131 at Wuhan University of Technology.

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One library administrator was contacted by e-mail at each of the three libraries to extend an initial invitation to members of their library staff to participate in the survey, which was posted on a SurveyMonkey.com website from January to February 2010. An invitation letter explaining the purpose and procedures for the study was included at the beginning of the survey website. The administrators contacted were also asked to allow participation in the study to be voluntary. Finally, the investigators assured the administrators and librarians that the identity of participants would not be disclosed. Surveys of administrators and librarians at all three libraries were completed within three weeks of their distribution.

In addition to the data collected through two surveys, Dr. Shao spent one week at Shaanxi Normal University Library in May 2010, to supplement the survey with live interviews with librarians and direct observations at that institution.

**Analysis**

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 interviews and observations were incorporated into the paper as appropriate.

# Results/Findings

Approximately 48 librarians completed the survey for librarians while one administrator, from each participating library, responded to the survey for administrators. The usable data were derived from 38 respondents of the survey for librarians. The results from the survey for library administrators are presented in Table 1, 2, and 3, whereas the results from the survey for librarians are showed in Table 4 and 5.

**International environment and collections of participating libraries**

As Table 2 shows all three university libraries in this case study make some special accommodations and provide some collections and services for users from other countries—users for whom Mandarin is not their primary language. All three libraries provide, for instance, bilingual signage in Chinese and English and all have some librarians with verbal skills in English.

Differences among the three libraries though are significant in the ratio numbers of English-speaking librarians to foreign users. Fudan reported 60 English-speaking librarians to serve approximately 4000 international students and scholars (one for every 66), and Shaanxi indicated they had 30 librarians to serve approximately 900 non-Chinese library users (one for every 30) and Wuhan reported only 10 librarians to serve over 950 foreign users (one for every 95). So, though Fudan had twice the number of English-speaking librarians, Shaanxi had more proportionally to the number of foreign users served. What these proportional numbers of librarian to user tell us is of course debatable. Certainly greater ratios of users to librarians can translate into less one-on-one face time with a librarian and more difficulty in scheduling time with a librarian. At Wuhan, where English-speaking were fewest in both real number and proportion among the three, foreign users may have even less opportunity to gain personal librarian assistance and thus may have to be more self-reliant on their own Chinese language abilities when doing research.

In terms of the adequacy of foreign language collections among the three libraries, only Shaanxi described their English language collection as "large and growing" while the other two expressed concern for needing "more growth to be adequate." Accessing those English-language and other resources may be problematic as only Fudan reported having alternate language versions of its library website.

**Table 2. International environment and collection in different language in each library**

| Language | | Fudan University | Shaanxi Normal University | Wuhan University of Technology |
|---|---|---|---|---|
| Bilingual Library Personnel | English | 60 | 30 | 9 |
| | Japanese | 1 | 2 | None |
| | Korean | 1 | 1 | None |
| | Others | 1 (German) 1 (Russian) | None | 1 (German) |
| Collection in Different Languages | Chinese | Large and growing | Very Comprehensive | Large and growing |
| | English | Needs more growth to be adequate | Large and growing | Needs more growth to be adequate |
| | Japanese | Needs more growth to be adequate | Small, but adequate | Small, hasn't added much in recent years |
| | Korean | Needs more growth to be adequate | Small, but adequate | None |
| | Other Languages | None | None | Very small collection in Russian |
| Alternative Language Version(s) of Library Website | | English | None | None |
| Bilingual Signs (Chinese and English) in building | | Yes | Yes | Yes |

**Current service and instruction programs of each participating library with regard to international users**

Table 3 presents the services and instruction programs each library provided to their users. It shows that all three institutions provide many basic user services such as reference desk help, online chat reference, and e-mail reference as well as for-credit library courses. Other kinds of services vary among the three. For example, two of the three give library orientations for all students and/or library instruction sessions for specific courses. Interestingly, though, none of the three provide an orientation for international students. Nor do they provide individual library research assistance designed specifically for international students. Fudan, however, did report providing an introduction to library services in English to interested foreign users.

**Table 3. Services and instruction programs at each library**

| Type | | Fudan University | Shaanxi Normal University | Wuhan University of Technology |
|---|---|---|---|---|
| Reference Services | Face-to-face reference service at a desk | Yes | Yes | Yes |
| | Online chat reference service | Yes | Yes | Yes |
| | E-mail reference service | Yes | Yes | Yes |
| | Individual library research assistance by appointment | Yes | None | None |
| | Other user service, please explain | Yes (telephone) | None | Yes (research help on a regular basis) |
| User education programs | Library orientation sessions for all students | Yes | None | Yes |
| | Library instruction sessions for specific courses | Yes Yes | Yes | None |
| | For-credit library course(s) | Yes | Yes | Yes |
| | Other programs to assist users, please explain | None | None | None |
| User education programs specifically for international students | As part of international students orientation | None | None | None |
| | Programs for specific country/language (e.g. based on students from difference countries or each discipline | Yes, librarians introduce services in English | None | None |
| | Individual library research assistance specifically designed for international students | None | None | None |

**Librarians' perceptions about serving international students and scholars**

Table 4 presents the means and standard deviations of the librarians' perceptions towards library services and resources to international students and scholars in three participating university libraries. Nine items were included in this section.

Mean scores for nine out of ten statements were equal to or greater than 3.0. It means that respondents tended to agree with these statements. The lowest rated statement "Library has a special committee or group to address issues related to international student and scholar needs" received a

mean score of 2.53, which indicated that the respondents tended to disagree with the statement. The highest rated and agreed statement was "International students and scholars are welcomed to the library" (M=3.82).

One way analysis of variance and post-hoc Scheffe tests were performed to indentify if there was any difference among three groups of respondents in relation to their perception towards providing services and resources to international students and scholars. The results indicated there was no significant difference among three groups of respondents for nine out of ten items. "International students and scholars are welcomed to the library" was the only item received a significant difference between the respondents at Fudan University Library (M=3.90) and Shaanxi Normal University Library (M=3.50), although both groups tended to strongly agree with the statement.

**Table 4. Perceptions towards library services and resources to international users**

| Theme | Statement | University Library | N | Mean | Standard Deviation |
|---|---|---|---|---|---|
| "Welcoming" / User-friendly staff | International students and scholars are welcomed to the library | Wuhan | 10 | 3.90 | .316 |
| | | Fudan | 20 | 3.90 | .308 |
| | | Shaanxi | 8 | 3.50 | .535 |
| | | Total | 38 | **3.82** | .393 |
| Library usage by foreign students noticed | International students and scholars use the library regularly | Wuhan | 9 | 3.56 | .527 |
| | | Fudan | 18 | 3.50 | .618 |
| | | Shaanxi | 8 | 3.38 | .518 |
| | | Total | 35 | **3.49** | .562 |
| Provide Assistance with Catalog | International students and scholars with limited Chinese language receive special assistance to use the library electronic catalog | Wuhan | 9 | 3.44 | .726 |
| | | Fudan | 20 | 3.50 | .513 |
| | | Shaanxi | 7 | 3.43 | .535 |
| | | Total | 36 | **3.47** | .560 |
| Provide Assistance with databases | International students and scholars with limited Chinese language receive special assistance to use the library databases | Wuhan | 10 | 3.40 | .699 |
| | | Fudan | 19 | 3.32 | .671 |
| | | Shaanxi | 8 | 3.50 | .535 |
| | | Total | 37 | **3.38** | .639 |
| Strategic plan | The Library has strategic plans to develop library service addressing international students information needs | Wuhan | 7 | 3.29 | .756 |
| | | Fudan | 17 | 3.24 | .562 |
| | | Shaanxi | 7 | 3.29 | .488 |
| | | Total | 31 | **3.26** | .575 |
| Interest in developing library services | I am interested in further developing library services for international students and scholars | Wuhan | 10 | 3.10 | .568 |
| | | Fudan | 20 | 3.35 | .587 |
| | | Shaanxi | 8 | 3.38 | .744 |
| | | Total | 38 | **3.29** | .611 |
| General training of librarians | Librarians are trained to provide service for international students and scholars | Wuhan | 7 | 3.29 | .951 |
| | | Fudan | 17 | 3.00 | .612 |
| | | Shaanxi | 7 | 3.29 | .488 |
| | | Total | 31 | **3.13** | .670 |
| Interest in developing collections | I am interested in further developing library materials for international students and scholars | Wuhan | 8 | 3.02 | .835 |
| | | Fudan | 18 | 3.22 | .548 |
| | | Shaanxi | 8 | 3.00 | .535 |
| | | Total | 34 | **3.09** | .621 |
| Special committee | Library has a special committee or group to address issues related to international student and scholar needs | Wuhan | 8 | 2.50 | .756 |
| | | Fudan | 15 | 2.53 | .640 |
| | | Shaanxi | 7 | 2.57 | .535 |
| | | Total | 30 | **2.53** | .629 |

Note. 4=Strongly Agree (SA), 3=Agree (A), 2=Disagree (D), 1=Strongly Disagree (SD), 0=Don't Know (DK); "0"for Don't Know was not included in the mean value calculation.

**Factors affecting services to international students and scholars as perceived by librarians of each participating library**

Table 5 presents the means and standard deviations regarding the factors affecting library services and resources to international students and scholars ranked by Chinese librarians. To identify the most important factors that contribute to services and resources to international students and scholars, ten items were included in the instrument.

The item "Materials in the languages of international students and scholars" was rated as the most important factor contributing to serving the international students and scholars (M=3.54). "Individual research consultation with international students and scholars for library research" (M=2.55) and "Library committee/group to address international students and scholars' information needs" (M=2.35) were two lowest rated items. The mean scores for the rest of seven items ranged from 3.47 to 3.01, and all were perceived as important factors.

One way analysis of variance and post-hoc tests were computed to examine the difference among three groups of respondents regarding their ratings of the factors contributing to services and resources to international students and scholars. No significant difference was found among three groups about this question.

**Table 5** Factors affecting services to international users perceived by participating librarians.

| Theme | Statement | University library | N | Mean | Standard deviation |
|---|---|---|---|---|---|
| Collections | Materials in the languages of international students and scholars | Wuhan | 9 | 3.56 | 0.527 |
| | | Fudan | 20 | 3.60 | 0.598 |
| | | Shaanxi | 8 | 3.38 | 0.744 |
| | | Total | 37 | 3.54 | 0.605 |
| Orientation | Library orientation for new international students and scholars | Wuhan | 10 | 3.40 | 0.699 |
| | | Fudan | 20 | 3.50 | 0.607 |
| | | Shaanxi | 8 | 3.50 | 0.535 |
| | | Total | 38 | 3.47 | 0.603 |
| English-language librarians | Librarians who speak the languages of international students and scholars | Wuhan | 10 | 3.20 | 0.632 |
| | | Fudan | 20 | 3.60 | 0.503 |
| | | Shaanxi | 8 | 3.38 | 0.518 |
| | | Total | 38 | 3.45 | 0.555 |
| Outreach | Meeting with international student and scholar groups on campus to learn their information needs | Wuhan | 10 | 3.40 | 0.699 |
| | | Fudan | 20 | 3.40 | 0.681 |
| | | Shaanxi | 8 | 3.50 | 0.756 |
| | | Total | 38 | 3.42 | 0.683 |
| Signage | Library signs in the languages of international students and scholars | Wuhan | 10 | 3.40 | 0.516 |
| | | Fudan | 20 | 3.45 | 0.759 |
| | | Shaanxi | 8 | 3.25 | 0.707 |
| | | Total | 38 | 3.39 | 0.679 |
| Cultural education of librarians | Librarians becoming knowledgeable of the home culture of international students | Wuhan | 10 | 3.20 | 0.422 |
| | | Fudan | 20 | 3.25 | 0.716 |
| | | Shaanxi | 8 | 3.38 | 0.518 |
| | | Total | 38 | 3.26 | 0.601 |
| Bilingual homepage | Library homepage provided in the languages of the international students | Wuhan | 10 | 2.80 | 0.789 |
| | | Fudan | 19 | 3.26 | 0.653 |
| | | Shaanxi | 8 | 3.13 | 0.835 |
| | | Total | 37 | 3.11 | 0.737 |
| Class sessions | Library user education for international students and scholars | Wuhan | 9 | 2.96 | 1.167 |
| | | Fudan | 20 | 3.15 | 0.587 |
| | | Shaanxi | 8 | 2.95 | 0.707 |
| | | Total | 37 | 3.01 | 0.782 |
| Consultations | Individual research consultation with international students and scholars for library research | Wuhan | 10 | 2.60 | 0.699 |
| | | Fudan | 20 | 2.65 | 1.040 |
| | | Shaanxi | 8 | 2.25 | 0.886 |
| | | Total | 38 | 2.55 | 0.921 |
| Special Committee | Library committee/group to address international students and scholars' information needs | Wuhan | 10 | 2.30 | 0.949 |
| | | Fudan | 20 | 2.35 | 0.933 |
| | | Shaanxi | 7 | 2.43 | 0.787 |
| | | Total | 37 | 2.35 | 0.889 |

4 = Very Important (VI), 3 = Important (I), 2 = Somewhat Important (SI), 1 = Not at all Important (NI); "0"for Don't Know was not included in the mean value calculation.

## Summary

This three case assessment of university library service for foreign students revealed important elements in current attitudes about future service for these students. Even though the topic of services for foreign users in Chinese libraries may not be strongly addressed in the published literature, concern for such service currently ranks high in responses by librarians surveyed in this study. Other indications of interest in public service for intentional students and scholars is the high ranking of a strategic plan

for developing library services for this group and a high ranking for individual interest in developing such service.

The questions of the second part of the survey for librarians differed from the first part--which examined the current state of affairs--in that the second set of questions were meant to provide a way for those surveyed to express their attitudes toward ideal outcomes – what they believe would be useful services and/or directions for development in this area at least within the limits of the survey questions. Interestingly, the highest ranked item was the more traditional objective of developing foreign language collections followed closely by the need for librarians to speak the language of international students. As a respondent noted in the open-ended question, "librarians should be able to speak more foreign languages in order to communicate with international users." The two goals of acquiring materials students can read in their own language and training librarians in foreign languages parallel recommendations found in the literature (Baron & Strout-Dapaz, 2001) that libraries must address international students' basic challenge of language and communication.

Other high ranked responses in the survey regarding important factors affecting services for international users were the importance of special orientation for these users, librarian outreach to them, and appropriate multi-lingual signage to direct them to resources. A librarian at Shaanxi indicated during the interview that librarians should become more aware of international students' need for more library assistance. The librarian interviewed suggested that libraries can work toward creating conditions to make it easier for international students to navigate the library. For example, she suggested libraries should provide signs in other languages and arrange materials so foreign users can find what they need more easily. These goals also correspond to a major challenge faced by international students found in the literature: adjustment to a new educational and library system. The other fairly high ranked question within this study was cultural education of librarians. This corresponds to another challenge encountered by international students: general cultural adjustment (Baron & Strout-Dapaz, 2001).

Interestingly, in both set of questions regarding perceptions and attitudes, the question regarding setting up library committees to address international users' needs ranked lowest in actual practice and potential importance. This conforms to arguments in the literature that individual efforts by librarians to work with international students are as effective as formal programs (Baron & Strout-Dapaz, 2001).

## Implications

From the late 1980s to 2010 university libraries in China have been making major efforts to "modernize" library practice through adaptation of many Western approaches to librarianship. This progress has not only included development and adoption of online digital resources but improvements and growth in users' services. One focus of development in this area has been directed toward user services for international students and scholars in particular.

This three-case assessment of perceptions and attitudes at three large university libraries in China both supports the assumption that librarians in China are strongly interested in improving services for international students and scholars while confirming Jiao, et al. that libraries in China continue to face challenges in fulfilling the needs of international students. As Jiao, et al. noted in their 2008 study, improving foreign language collections remains a high need and this study confirms that librarians understand this priority. Furthermore, while Jiao, et al. found that foreign students expressed concern for a lack of welcoming librarians described as "unfriendly staff" and a need for more English-speaking librarians, this study showed that librarian respondents at the three libraries queried not only welcome foreign students but rate that quality highest. They also agree with the need for more English-speaking staff. Finally this study showed parallels in interests between Chinese librarians and international students studied by Jiao, et al. in the need for better foreign student orientation, research assistance, and signage. Services such as providing a multi-lingual homepage (a kind of service most Western libraries also lack) and individual research consultations though not addressed by Jiao, et al. are valuable improvements that also should be considered. Finally, the study showed that though librarians at Chinese universities are dedicated to service for international students and scholars, they are cautious about creating unnecessarily formal structures such as a committees to achieve these improvements. Western libraries should perhaps take this advice to heart.

It is the hope of the authors that the findings from this study can be used to stimulate discussion about and facilitate improvements in library services for international students and scholars in China. As a foundation for academic libraries in China to evaluate services and resources for international students and scholars, these kinds of case studies can lead to academic libraries in China addressing their policies and services associated with helping foreign library users become part of their campus academic community. Likewise, librarians in the U.S. can seek similar assessment models for improving their services for international library users. Thus, the ultimate goal of this study was to help build a foundation for developing strategies for improving library services and resources for

international students and scholars in Chinese academic libraries which in turn may affect improvement of library services for this growing library constituency world-wide.

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[1] For the sake of stylistic variety, the terms "international" and "foreign" are used interchangeably throughout this paper in reference to library users in Chinese universities originating from other countries and/or for whom a Chinese language such as Mandarin is not mastered enough for them to be self reliant at doing research in that language. The authors also shorten references to international students and scholars to simply "students" or "users" but are referring to scholars as well.