Academic Library Usage of International Students:
A Case Study at Wuhan University, China

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ABSTRACT: Despite the rapidly growing number of international students in Chinese universities during recent years, there lacks focused research on how they use university libraries for study and other purposes. In filling this gap, this study used a structured questionnaire to survey international students at a top comprehensive university in China to gather the participants’ demographic information and reveal their various information needs as well as their information seeking behavior. The study tries to find the relationship between the participants’ demographic characteristics and the satisfaction level of using university library resources, both physical and online. The findings of this study divulge that the majority of international students rely upon the internet and the university library system to get desired information and that they are continuously facing problems due to the language barrier and complicated online system. This study also reveals that the language (English or Chinese) used in teaching a course does not have any relationship with the problem faced by international students. Based on the information gathered from the survey, some comments and recommendations are offered to improve access to information and knowledge for international students in Chinese universities.

I. Introduction

The fast growing economic power of China in the past decade has greatly enhanced the quality of its higher education (Li, 2017). The country has become one of the preferred destinations for international students because of renowned universities and the wide range of courses offered. Due to various socio-economic reasons, China is witnessing an exciting increase in the number of international students in many universities (Nzivo & Chen, 2013). According to the statistics by the Ministry of Education of the People’s Republic of China, there were altogether 442,773 international students from 205 countries studying in China (excluding Hong Kong, Macau, and Taiwan) in 2016 (China, 2016).

Wuhan University is a top ranking comprehensive university in China. The official data from the School of International Education at Wuhan University shows a steady increase in the number of international students: 737 international students enrolled in various disciplines in 2013, 960 in 2014, 1134 in 2015, and 1145 in 2016. The yearly increased enrollment of international students not only represents the number of international students per se but also the global education values,
cultural diversity, and goodwill the foreign students bring along with them (Mehra & Bishop, 2007).

Chinese universities have made great efforts to help international students get accustomed to the new environment. Because of language barriers and differences in cultural backgrounds and learning styles, however, many international students have encountered various problems in their information seeking activities, especially their use of university libraries (Jiao, Zhuo, Zhou, & Zhou, 2009). It is expected that university libraries provide appropriate academic, cultural, personal, and informational support for the success of international students.

There lacks sufficient research on the information needs and library usage of international students in Chinese universities. Previous studies mainly focused on international students’ perception of academic libraries and the information resources provided (Nzivo & Chen, 2013). Nowadays, they not only visit the physical libraries to obtain print books, journals, and so on, but also make use of the E-library to access the online catalog as well as electronic resources (Kumah, 2015). Given the changes in their information seeking activities, this study used a structured questionnaire to survey international students at Wuhan University to identify their information needs, library usage and problems, and the degree of satisfaction of library services with a view to offering some practical suggestions for Chinese academic libraries to better support international students’ educational needs.

II. Literature Review

Chinese students’ information seeking behavior was studied widely outside China (Ping, 1998; Rodriguez, 2014). Little research has been conducted on how international students seek information in China. If any, most focused only on the use and perception towards university libraries (Liu, 2013; Nzivo & Chen, 2013).

A study on the use of academic libraries will definitely help to identify the information seeking behavior of international students in China. To be specific, international students in China have three types of information needs and information seeking behaviors: 1) international students’ information needs, 2) their information seeking behavior on the internet, and 3) their information seeking behavior in the university library.

1. International Students’ Information Needs

The study on international students’ information needs and seeking behavior has a long history. Volet (1999) observed that “studying in a foreign country is challenging for most students” due to their different cultural backgrounds, linguistic problems, intercultural adaptation problems, and different levels of skills (Meratian Esfahani & Chang, 2012).

Wilson (1997) pointed out that information needs are influenced by cultural backgrounds such as emotional, educational, demographic, social or interpersonal, environmental, and economic variables.
As most international students’ purpose is to study, it is obvious that the information needed is related to their academic program. This fact is supported by various studies carried out on international students in different countries. It is found that international students need a variety of information to complete their academic work, including assignments and academic research (Nwobasi & Uwa, 2013) and lecture notes (De Silva & Chandrawamsa, 2016).

The need for information also varies according to the level of study. The study by Singh, Kumar, and Khanchandani (2015) on international students of different education levels pointed out dissimilar information needs for research scholars and post graduate students. Most post graduate students need information for their program of study while most research scholars need information related to research.

While trying to adapt to the new environment in the host country, various information regarding everyday activities such as shopping, entertainment, living, transportation, and foods/drinks are significant to international students (Chung & Yoon, 2015). Understanding the history, culture, travel, and learning the language of the host country is another types of information the international students generally seek for (Liu, 2013).

2. International Students’ Information Seeking Behavior on the Internet

With the availability of information on the Internet, web search engines have become a major tool and web documents a popular medium for information retrieval (Tombros, Ruthven, & Jose, 2005). Internet as an information source is used to replace traditional sources like classroom lectures or other traditional instructional methods (Khan, Khan, & Bhatti, 2011).

With the advancement in information and communication technology (ICT) and ease of access, more students are shifting towards the digital technology like websites, web search engines, electronic databases, etc. as an information source (Kukkonen, Kärkkäinen, & Keinonen, 2012).

It is proven that the use of the internet in teaching is useful for students (Brändström, 2011). This might be the reason that educational institutions are adopting new ICT technologies and encouraging students to use them. As a result, university students are shifting from traditional print materials to electronic sources. This is corroborated by Kumah's finding in 2015 that the internet, rather than the library, is the source of information preferred by students.

Several studies revealed that the internet and electronic sources of information are more popular among international students due to various challenges like language, cultural backgrounds, and different learning styles in the host country (Akpojotor, 2016; Huang, Li, & Zhou, 2016). A survey conducted on international students in different universities in Beijing and Wuhan revealed that the students are quite satisfied with new electronic resources and online accesses. The result also showed that the internet information resources are widely used and that the traditional print materials are still not preferred as they are difficult to find in the libraries (Jiao, Zhuo, Zhou, & Zhou, 2009).

Even though electronic resources are widely used by international students, it is sometimes hard to adopt the technology in the new environment. Mehra & Bilal (2007) pointed out the difficulties
in adapting to the technologies while seeking information. The problem can range from retrieving information to managing them. The unfamiliarity with the language option provided on websites and the lack of adequate training in using library systems cause additional problems. Language related problem seems to be the major problem for international students while accessing the university library website in the host country. The efforts towards building a fully functional library website in English in Beijing Normal University supports this opinion (Liu, 2013).

Besides the internet, search engines, and electronic databases, other form of web sources can also be used for information seeking. Hamid, Bukhari, Ravana, Norman, & Ijab (2016) acknowledged the role of social media in information seeking behavior of international students. Sin and Kim (2013) also suggested that social networking sites like Facebook can play an important role to meet international students’ day-to-day information needs.

3. International Students’ Information Seeking Behavior in University Library

After the internet and other digital sources, the university library is another main source of information for students. Studies show that students make use of the university library to satisfy their information needs (Kumah, 2015). The majority of students use the university library as an information source for various purposes. Some use it for study or completing assignment/research (Moly, 2014). Some use the library for photocopying course work (Ajayi, 2004).

Although students rely on the internet and university libraries’ online resources for information, they still use the physical library for hardcopy materials like books, journals, and papers (George, Bright, Hurlbert, Linke, St. Clair, & Stein, 2006). However, international students find it troublesome to access the physical materials due to differences in the library system in their home country, even though they have some library background experiences (Nzivo & Chen, 2013).

In addition, international students have the language barrier. They continue to face problems due to limited use of the English language in the library. Shao and Scherlen (2011) pointed out the challenges faced by Chinese libraries in fulfilling the needs of international students. They suggested using signage in other languages and arranging materials for easy location. Liu (2013) also advocated that the Chinese academic libraries should provide a bilingual environment (i.e., Chinese and English) in both physical and virtual library space with the addition of library resources in foreign languages as well. Recruiting English speaking librarian or a library liaison person who can speak English would be beneficial for both the academic library and the international students (Jiao, Zhuo, Zhou, & Zhou, 2009).

III. Objective of the Study

The objective of the study is to answer the following questions:

1. What information is needed by international students at Chinese universities?
2. What are the sources of information used by international students? Does their availability affect the information seeking behavior of international students?
3. Are the available resources fully used by international students?
4. Are there any barriers or challenges face by international students in accessing various information sources?

IV. Research Methodology

The study employed an online questionnaire to collect data from the international students enrolled in various schools and departments at Wuhan University, including both Chinese and English taught students at different levels. The questionnaire was designed to identify the information needs and library usage of international students at Wuhan University.

The survey questionnaire was divided into three major parts. The first part collects the demographic information as well as other basic information of the respondents such as country of origin, area of study, duration of stay in China, Chinese proficiency level, and the language used in teaching a course. The second part aims to capture what information is needed and how the university library is used by international students, including both the physical library and the e-library. The third part draws the comments on library services and suggestions to the university and to other students through open-ended optional questions.

As Chinese being the preferred language after English by international students for searching materials (Nzivo & Chen, 2013), a bilingual questionnaire was prepared in electronic form using a Chinese online survey service, Wen Juan Xing (https://www.wjx.cn/), and distributed through WeChat, a Chinese multi-purpose social media mobile application software (https://www.wechat.com/en/). The questionnaire was distributed to individuals and in the WeChat groups that are associated with the university dormitory services and the Office of the School of International Education for the purpose of information exchange between the office and international students. These groups consist of a maximum number of international students as group members. The main reason behind using WeChat for the distribution of the questionnaire is that it is preferred by most international students for communication and information in China (Zhu & Chhachhar, 2016). The collected data was analyzed with one-way ANOVA and independent t-test using SPSS V21.

V. Findings and Analysis

Altogether, 121 responses were received during the one-month period of the survey time. Out of 121, 3 responses were filled with erroneous data in one of the questions where they have to specify the area of studies.

The first part of the survey questionnaire was associated with the demographic characteristics of the sample. The respondents were asked to provide their demographic information and other background information from Q1-Q8. The frequency and percentages distribution of respondents in each demographic variable are presented in Table 1.

| Table 1. International students’ demographics and background information |
|-----------------|-------|-------|
| Variable        | Group | Frequency | Percentage |
| Gender          | Male  | 64      | 52.89%     |
|                 | Female| 57      | 47.11%     |
| Age             | Below 20 | 6      | 4.96%      |

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Of the 121 respondents, males and females were 52.89% (n=64) and 47.11% (n=57) respectively. Among them, most of the respondents were of age 20-25. These international students originated from various countries in all major continents. The majority of them were from Asia and Oceania (74.4%, n=90). This supports Nzivo & Chen’s (2013) finding that Asian and African students were dominant at Wuhan University.

Regarding the duration of stay, most respondents (N=53, 43.8%) have been living in China for 1 to 2 years and a smaller percentage (N=18, 14.88%) for more than four years. According to the survey, more than half of the respondents are Master’s students (56.2%, n=68), followed by Bachelor’s (28.93%, n=35) and Ph. D. (14.88%, n=18). None were post-doctorate. According to this data, the Master’s degree program is considered to be the most popular among international students.
According to Wuhan University’s classification of faculties and schools (http://en.whu.edu.cn/Schools1.htm), the majority of the respondents’ field of study was Social Sciences (39.7%, n=48), followed by Medical Sciences (20.7%, n=25), Humanities (15.7%, n=19), Information Sciences (14%, n=17), Engineering (6.6%, n=8), and Sciences (0.8%, n=1).

Regarding the language used in class, 55.37% (n=67) responded that it is the Chinese language. This implied that even though there is a high increment in intake of foreign students in Wuhan University, a huge group of foreign students take classes with regular Chinese students in the Chinese language. A significant number of the respondents (25.62%, n=31) have a good Chinese proficiency level while the same number of the respondents have marked themselves as poor. Very few (4.96%, n=6) considered themselves to be excellent in the Chinese language.

1. Information Needs

Before studying the information seeking behavior of international students, it is advisable to outline their information needs first. According to Wilson (1997), information needs are influenced by cultural background traits such as education, emotions, environments, and the social context revolving around the need. Q9 responds to the respondents’ information needs. It tries to garner various information needs and information areas to determine whether or not they are related only to the academic needs.

As the majority of international students are pursuing Master’s or doctoral degrees, they need information resources carried in periodicals, journals, and other research publications. At the same time, they are also looking for information on how to better their progress in Chinese proficiency. Liu (2013) observed the international students’ need for information in the Chinese language and literature. The majority of the respondents are seen to search for Chinese travel guides, history, and culture while a few focused on information related to finding jobs. This is a clear indication that despite academic needs, international students have developed interest in Chinese history, Chinese language, travel, and culture. Table 2 depicts the major areas of information needs of international students in China.

Table 2. Information needs areas of the respondents

<table>
<thead>
<tr>
<th>Areas of Information Needs</th>
<th>Bachelor (N=35)</th>
<th>Masters (N=68)</th>
<th>Ph.D. (N=18)</th>
<th>Total (N=121)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about course-related assignments</td>
<td>22 (62.9%)</td>
<td>35 (51.5%)</td>
<td>12 (66.7%)</td>
<td>69</td>
</tr>
<tr>
<td>Information for improving the Chinese language</td>
<td>17 (48.6%)</td>
<td>29 (42.6%)</td>
<td>5 (27.8%)</td>
<td>51</td>
</tr>
<tr>
<td>Information for understanding Chinese history, culture and travel guides</td>
<td>14 (40.0%)</td>
<td>18 (26.5%)</td>
<td>5 (27.8%)</td>
<td>37</td>
</tr>
<tr>
<td>Information for periodicals and other research materials</td>
<td>8 (22.9%)</td>
<td>35 (51.5%)</td>
<td>11 (61.1%)</td>
<td>27</td>
</tr>
</tbody>
</table>
2. Information Sources

The means and media to seek information by international students may differ from that of their home country due to various political and cultural reasons as well as different learning styles in the host country. The media that they are familiar with in their home country might not be able to be used the same way in the host country. Q10 looks at the sources of information available at their disposal within the university.

The internet seems to be the most trusted source, taking up to nearly 33% of the total information needs of international students. Textbooks and class notes are also very strong sources that they rely upon, which echoes the study conducted by (Nzivo & Chen, 2013). On the other hand, it contradicts their notion that international students are usually attached to books and other written materials. Maybe due to the advancement of ICT, fast and easy access, international students are shifting towards electronic version of information rather than traditional print sources. Table 3 shows various other sources of information accessed by international students.

<table>
<thead>
<tr>
<th>Information source</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet sources</td>
<td>94</td>
<td>32.9</td>
</tr>
<tr>
<td>Text books</td>
<td>56</td>
<td>19.6</td>
</tr>
<tr>
<td>e-Library</td>
<td>52</td>
<td>18.2</td>
</tr>
<tr>
<td>Class notes</td>
<td>41</td>
<td>14.3</td>
</tr>
<tr>
<td>Library materials (hardcopy)</td>
<td>40</td>
<td>14.0</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: Multiple responses allowed.

When asked about the preferred material types in Q11, a huge group of the respondents (66%, n=80) indicated the electronic source of information, thanks to the ever-growing digital revolution the world has witnessed. The finding is in support of the previous findings that students in this digital age mostly seek information through various electronic sources such as e-books (Cumaoglu, Sacici, & Torun, 2013), web search engines, online encyclopedias (Head & Eisenberg, 2009), and social networking sites (Aillerie & Mcnicol, 2017).

3. Physical Library Usage

Kumah (2015) observed that graduate students use both the internet and the library to meet their information needs. The Wuhan University Library is a huge source of information with more than 228,000 books and periodicals from both inside and outside China (Wuhan University Library,
2011). This survey tries to find out the usage of this massive collection in the library by international students.

Q12 aims at getting an overview of international students towards library visit whether it be departmental or the central. 70% answered with Yes while the rest said they do not go to any of these libraries. Among those who visit the university library, when asked about the frequency of their library visit in Q13, most of them indicated that they do so only once a month. Very few said that they visited the university library daily. Some said they have visited the library a few times so far or only when they are required to visit. This clarifies that although a huge number of students are going to the library, the frequency of they visit is not regular.

Due to the limited signage in English to assist the use of an overwhelming library collection, it is a matter of concern for international students while visiting the physical library. Q14 tries to gather problems and barriers that the respondents have to face during the library visit.

<table>
<thead>
<tr>
<th>Types of barriers</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese language barrier</td>
<td>42</td>
<td>34.7</td>
</tr>
<tr>
<td>Inadequate sitting area and computer terminals</td>
<td>28</td>
<td>23.1</td>
</tr>
<tr>
<td>Inadequate knowledge about using library</td>
<td>22</td>
<td>18.2</td>
</tr>
<tr>
<td>Old materials</td>
<td>17</td>
<td>14.0</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
<td>9.1</td>
</tr>
<tr>
<td>non-cooperative library staff</td>
<td>4</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Note: Multiple responses were allowed.

Even though the majority of the respondents do visit the university library, it is clear as from the table 4 shows that they have problems accessing the collection. One of the main reasons is the Chinese language barrier. This finding corroborates with that of Gatwiri’s (2015) that the language difficulties are the most critical issue faced by international students.

Another major problem to those who visit the library is the lack of sitting space. A significant number of the respondents find it hard to find a seat in the library.

Not getting enough education and training on the organization and arrangements of the library is another dominant problem indicated by the respondents. Many of them cannot find enough new and updated books or other materials in the library. A couple of the respondents indicated that they were discouraged by some non-cooperative library staff.

Despite various difficulties and barriers, most respondents’ view towards using library was neutral (neither dissatisfied nor satisfied) on average. Many respondents are satisfied with the current library system. Only a few indicated their dissatisfaction. Figure 1 shows the satisfaction level of the respondents in visiting the university library.
While 70\% of the respondents visit the library, the rest do not. Q16 aims to find out the reason why they do not visit the library. When asked for the reason(s) for not going to the library, many respondents indicated that the Chinese language is the main contributing factor. For this reason, it can be said that a group of the respondents do not go to the library due to the language problem. Those respondents who go to the library are facing the same problems. The Chinese language seems to be one of the major barrier for international students while visiting the physical university library.

An independent *t*-*test* on the language used in teaching was conducted as well as a one-way ANOVA test on the relationship between various other factors and the satisfaction level of visiting the university’s physical library.

The independent *t*-*test* for the effect of the teaching language (Chinese or English) on the satisfaction level of visiting the university library revealed that it was not statistically significant, *t*(119)=0.68, *p*=0.776. On the other hand, the result shows that there was a statistically significant effect of the duration of stay in China on the respondents’ satisfaction level of visiting the university’s physical library at *p*<0.05 determined by one-way ANOVA, *F*(3,117)=3.867, *p*=0.011. A Tukey’s HSD post hoc test revealed that those who have stayed in China for 3-4 years (*M*=2.73, SD=1.95) are more satisfied with the university’s physical library than those who have stayed for more than 4 years (*M*=2.39, SD=2.22), for 1-2 years (*M*=2.08, SD=2.32) and those who have been in China for less than 1 year (*M*=0.58, SD=2.9).

Next, the test for the area of study was compared in terms of the satisfaction level of library visit. The result of this test was not statistically significant, *F*(6,114)=0.650, *p*=0.690. Similarly, the test for the education level with satisfaction level of library visit was not statistically significant *F*(2,118)=2.597, *p*=0.079. The Chinese proficiency level *F*(4,116)=1.69, *p*=0.15 was not statistically significant, either.
4. E-Library Usage

The use of internet and electronic information resources has been on the rise and students have mastered the skills of using it (Akpojotor, 2016). It was assumed that the international students at Wuhan University are also aware of using such electronic information resources. Q17 aims to identify the preference when it comes to the use of Wuhan University’s e-library, which includes databases, e-journals, and various other electronic information resources. It was somewhat surprising to learn that only about 58% of the respondents gave a positive answer. Q18-Q20 aim to identify the service problems and the satisfaction levels of the respondents regarding Wuhan University’s e-library system.

As table 5 illustrates, 45.5% of the respondents use the e-library system to download e-journals, 24.8% use it to read or borrow books and articles, 13.2% use it to reserve seats (http://seat.lib.whu.edu.cn/login?targetUri=%2F) and 4.1% use it for some other reasons.

<table>
<thead>
<tr>
<th>Services</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download e-journals</td>
<td>49</td>
<td>40.5</td>
</tr>
<tr>
<td>Read or borrow books and articles</td>
<td>30</td>
<td>24.8</td>
</tr>
<tr>
<td>Seat reservation in library</td>
<td>16</td>
<td>13.2</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Note: Multiple responses were allowed.

The library website does not have an English version. Therefore, international students have no choice but to use the Chinese language version for all those services provided by the university library. This may be troublesome for those international students who attend classes taught in English. Table 6 illustrates different categories of barriers and problems faced by the respondents.

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Chinese (N=40)</th>
<th>English (N=30)</th>
<th>Total (N=70)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complicated search and download process of e-journals</td>
<td>21 (52.5%)</td>
<td>17 (56.66%)</td>
<td>38 (54.28%)</td>
</tr>
<tr>
<td>Insufficient materials</td>
<td>16 (40%)</td>
<td>6 (20%)</td>
<td>22 (31.42%)</td>
</tr>
<tr>
<td>Site not up-to-date</td>
<td>9 (22.5%)</td>
<td>2 (6.66%)</td>
<td>11 (15.71%)</td>
</tr>
<tr>
<td>Others</td>
<td>5 (12.5%)</td>
<td>6 (20%)</td>
<td>11 (15.71%)</td>
</tr>
</tbody>
</table>

Note: Multiple responses were allowed.

Wuhan University’s e-library contains many national and international periodicals, articles, and e-books. However, it is difficult to search and download for international students whether their classes are taught in Chinese and English. This is a major barrier for the respondents while using university e-library system. Insufficient materials is also a challenge that many respondents had to
deal with. Up to 31% of the respondents believe that the materials gathered by Wuhan University are not sufficient. 11% reported that the website was not up to date with all relevant materials. Another 11% face some other types of problems and barriers. Since almost the same number of students enrolled in courses taught either in Chinese or English face almost the same kind of problems, it is conclusive to say that the problems that international students faced have no relationship with the language used in class.

Despite various problems faced by both types of the respondents, the satisfaction level towards the university’s e-library system is neutral (i.e., neither satisfied nor dissatisfied) as shown in figure 2, just like that of visiting the physical library.

![Figure 2. e-library usage satisfaction level](image)

Many respondents are not interested in using the university library website. Q21 aims to identify the reasons behind this. Many are convinced that lack of knowledge and education on how to use the website is a major contributing factor. Some have gone through the website and in several occasions failed to find whatever they have been looking for. Some find it relatively difficult to understand the Chinese version of the website. Some have other reasons for not using the university library website.

It is noted that a significant number of international students who attended classes taught in Chinese do not use the Chinese version of the e-library system due to the lack of knowledge about how to use it. They eventually search for educational materials in the less functional English version. This implies that, even though the language used in class is Chinese, it has a very weak relationship with using the fully functional Chinese version of the e-library system.

An independent *t*-test was carried out for the language used in class and one-way ANOVA test between various other factors and the satisfaction level of using university library online system. The *t*-test for the language used in class on the satisfaction level of using the university library’s online system shows that there was no statistical significance between these two groups,
t(119)=0.902, p=0.164. There was a statistically significant effect of the duration of stay in China on the satisfaction level of using university library online system at p<0.05 determined by one-way ANOVA F(3,117)=2.856, p=0.04. A Tukey HSD post hoc test revealed that those students who have stayed for 3-4 years (M=1.88, SD=2.48) are more satisfied than those living for 1-2 years (M=1.68, SD=2.32), more than 4 years (M=0.83, SD= 2.79), and less than 1 year (M=0.13, SD=2.65).

The test for the area of study and satisfaction level of using the university library online system was not statistically significant, F(6,114)=0.626, p=0.709. In the next test of education level and satisfaction level of using the university library online system, the result was statistically significant, F(2,118)=6.508, p=0.002. The Tukey HSD post hoc test indicated that the Ph.D. students (M=2.17, SD=2.72) are more satisfied with the university library online system than Master’s (M=1.69, SD=2.48) or Bachelor students (M=0.06, SD=2.47). The Chinese proficiency level F(4,116)=0.84, p=0.50 was also not statistically significant.

5. Comments and Suggestions from the Respondents

Q22 and Q23 focused on comments and suggestions to the university library and to other students. These two questions aim to get feedback from international students, some of which could be used to make the system not only conducive but also better. A total of 43 participants managed to give their comments and suggestions in Chinese or English.

1) Additional suggestions for the library and/or the e-library system
The most frequent suggestion was related to the e-library system. Most respondents suggested that the system should be make easier to access and that the English version of the website should be fully functional. Regarding the physical library, most respondents suggested recruiting at least one English-speaking library staff. Some of the suggestions regarding both the physical library and the e-library system are as follows:

“English website should be fully functional as Chinese.”

“...should replace the current complicated system with easy-to-use systems for both the library and the e-library.”

“Should be user-friendly.”

“Should have a fully functional English version.”

“There should be the English language also to ease the utilization of sources.”

“I am suggesting that maybe library staff should learn English because not all international students are able to speak Chinese.”

“...not enough academic books in the English language.”

“...have to improve for foreigners.”

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“As the university has many international students, it is very important that the receptionist be able to speak English as well.”

“Extend books’ borrowing period.”

“...add some more seating areas in the library.”

2) Suggestions to other students:
Despite the challenges that international students have to deal with, some respondents believe that the e-library system is the most appropriate with the capacity to serve them well. They have gone ahead to encourage their fellow international students to adopt the e-library system to borrow and download resources. Some has asked other international students to share the procedures on how to download periodical articles from the e-library and how to utilize the services in the library.

VI. Further Discussion

1. Library usage of international students

Regarding RQ1, the finding of the study have revealed that a larger percentage of the international students look for information related to their research materials, such as journals and periodicals as the majority of them are research-oriented students (i.e., Master’s and Ph.D. students). In order to make their stay more gratifying, international students also seek information related to various aspects of the Chinese language, culture, history, origin, and travel, which turn out to be more than useful. Some are also interested in starting their professional carriers in China, as they are seeking job-related information.

Regarding RQ2, the findings of the study have revealed that the internet is the main source of information for international students and that they truly rely on it. They also use the library resources, textbooks, and class notes. Their comments and suggestions on adding more English books and materials in the library indicate that they have been hampered in getting enough knowledge from this huge source of information in one way or other.

2. Implications for academic library services

A significant number of the respondents have requested for at least one English-peaking library staff to provide assistance when needed. It is clear that those students who have stayed in China for a few years have a higher satisfaction level towards the physical library than others. This may be because they are familiar with the library arrangements and whereabouts of the resources. But for newly enrolled international students, the use of bilingual signage is necessary for easy access to the library resources. A picture guide on how to reserve seats and use library resources will be really helpful.

Most students download e-journals from the library website and they find the collections in the university library useful. At the same time, it is not an easy task for them due to the unavailability
of services and facilities in an English version. Only the Chinese language website is fully functional. All the international students are obliged to use it to receive maximum benefit from such services. As they are not able to make full use of library resources (RQ3), they end up seeking help from their Chinese counterparts or other friends who have higher Chinese proficiency level and/or who have prior experiences of doing so. This has increased the dependency of those students upon others. Only the Ph.D. students and those students who have stayed in China for a few years seem to be satisfied with the university library online system.

The most difficult challenges faced by international students in seeking information are resulted from the library and the library online system (RQ4). The Chinese language seems to be the main barrier while using the library. There are two types of international students: those who attended classed taught in English and those who attended classes taught in Chinese. Even for those taught in Chinese, the finding of the survey shows that they still use English to seek desired information.

There is no doubt that the Wuhan University Library has a huge collection of e-journals, books, articles, reports, and other information resources that are beneficial for the improvement of students’ knowledge. However, it seems that the international students are not getting full benefits from this huge pool of information and knowledge. Since the English version of the online library system lacks complete services and facilities than that of the Chinese version, English-taught international students find it difficult in using it and continuously seeking help from others.

There is another group of international students whose teaching language is Chinese. Their Chinese proficiency level may be higher than that of English-taught students. Nonetheless, they are also facing challenges when downloading e-journals due to complicated search and download process. Proper training and education on using the library system, services, and facilities is required from concerned departments such as the School of International Education.

VII. Conclusion

The main objective of this study is to identify the information needs and library information seeking behavior of the international students at Wuhan University. As the number of international students has been on the rise, it is imperative that proper arrangements must be put in place to help them to fulfill their information needs. Despite their different cultural backgrounds, international students are likely to expect a hassle-free environment in their pursuit of academic degrees. The findings of the study show that even the language used in teaching is Chinese, the nature of the challenges faced is not different from that of the students who attend classes taught in English.

The international students use various means and mediums to get information for their academic and non-academic purposes. Despite the language barrier, they continue to use the university library facilities to obtain the right information. It will be mutually beneficial for both the international students and the concerned departments on campus if the language barrier could be eased.

There are not many studies on information needs and library information seeking behavior of international students in China. This study contributes to this research area and. The findings of
this study may also be helpful in making strategies for better understanding the information needs and library information seeking behavior of international students.

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