Super-Diversity and Foreign-Born Students in Academic Libraries: A Survey Study

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abstract: This paper reports the results of a survey study of foreign-born students’ use of academic and public libraries. With growing numbers of international students and immigrant students, academic libraries will need to gather data on this population to improve services for them. The researcher administered the survey at a public liberal arts college in the fall of 2014. According to the enrollment report, there were 3,004 foreign-born students that semester. The survey screened 274 students and gathered 92 (N = 92) complete surveys. Independent samples t-tests were used to look for relationships between demographic variables and library use variables. The author also used Somers’ d test of associations to examine associations between demographic variables and library use variables. The analysis shows that foreign-born students use both public and academic libraries with great frequency for academic tasks. Variables such as being a first-generation foreign-born student and being a foreign-born student of color also have a statistically significant effect on how these students use academic libraries as a social and study space.

The author uses a theory from migration studies called “super-diversity” to discuss how multiple identities and categories of belonging are important variables when it comes to public services. A super-diversity approach involves a shift away from studying only one variable (such as ethnicity, language use, gender, or the like) and looks instead at the effects of multiple variables on an issue, in this case library use. In addition to incorporating super-diversity as part of the data analysis, the author also discusses how the Association of College and Research Libraries Diversity Standards provide guidelines for improving services to foreign-born students based on the insights from the survey and statistical analysis.

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**Introduction**

Do culture, race, and ethnicity, and immigration student status influence academic and public library usage? The idea for this study came in 2012, with the publication of the Association of College and Research Libraries (ACRL) 2012 Diversity Standards: Cultural Competency for Academic Libraries. To date, surprisingly few articles in the field of library and information science address these standards. Moreover, few quantitative and qualitative studies address these standards in their research design. In this study, the author gathered data around some of these standards, namely:

- Standard 1. Cultural awareness of self and others
- Standard 2. Cross-cultural knowledge and skills
- Standard 6. Language diversity
- Standard 9. Cross-cultural leadership

Following discussions with colleagues at professional venues about the assumptions these standards represent, the author began to design focus groups and a survey instrument with the goal of measuring information on diverse populations, such as those represented in Brooklyn College in New York, the author’s home institution. This paper reports the results of a survey study conducted on a population of foreign-born students. The analysis focuses on interpreting the data on academic and public library use with attention to the service and organizational implications as outlined in the ACRL Diversity Standards.

The author chose foreign-born students as the population in this study and approached the analysis through the frame of “super-diversity,” a term used in migration, diversity, and ethnic studies to encompass “a shift of focus from fixed entities like ‘the ethnic group’ [or gender, immigration status, age, income, etc.] to a dynamic interplay between different characteristics of individual members of ethnic groups and the fluid relationships between them; in other words: a shift from an ‘ethnic lens’ to a multidimensional lens.” The author employs this multidimensional approach to see which demographic categories are more meaningful for the population of foreign-born students who participated in this survey. In the literature of library science, most related research focuses specifically on individual diverse groups, such as immigrants or international students. Unlike these studies, this paper represents a unique effort because the category of foreign-born students captures the full range of immigration statuses, combining the categories of immigrant and international students into one observable population.

Foreign-born students use both public and academic libraries with great frequency, but they utilize public libraries as secondary to academic libraries, meaning that the usage statistics mirror each other, but less usage is reported in public libraries.
usage statistics mirror each other, but less usage is reported in public libraries. The author did not see a mutually exclusive pattern in which one type of library was favored over another for a certain type of activity, such as searching databases or checking out books. The author also identified patterns in which different demographic populations had usage preferences (for example, first-generation students liked to meet friends in academic libraries, and Asian students generally chose the academic library for printing).

Studying how foreign-born students use public and academic libraries can help public library systems and academic libraries understand how these users distinguish between these two kinds of libraries. These findings and the survey questions show how librarians can use demographic data, as well as migration and diversity concepts, to plan services for foreign-born students. The implications of this pilot study are clear: if foreign-born students use both kinds of libraries, there are opportunities to create innovative services and institutional partnerships between public and academic systems. The author will discuss this idea further in a later section, “Diversity Standards as a Lens to Interpret Our Results.”

Foreign-Born Students in Brooklyn College

Brooklyn College, founded in 1930, is a public liberal arts undergraduate institution that is part of the City University of New York (CUNY) system. The college enrolls between 17,000 and 18,000 students annually, with about 14,100 undergraduates and 3,200 graduate students. It is exceptionally diverse, with “graduates who come from 150 nations and speak 105 languages.” About 20 percent of the undergraduates and 15 percent of the graduate students are foreign-born, according to the college’s spring 2016 enrollment report.

Brooklyn College Library is one of 31 libraries in the City University of New York system, which as a whole employs 250 faculty and professional staff and spends $34 million in personnel and $13 million on information resources annually. According to the Department of City Planning, in 2010 the Borough of Brooklyn was home to 30 percent (919,980) of New York City’s foreign-born population of 3,066,599 people. Given the great diversity represented in Brooklyn, at Brooklyn College, and in the CUNY system in general, it is important that our libraries begin to gather and analyze information on the information needs and choices of foreign-born students to address the requirements and preferences of this population.

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Literature Review

This selective literature review addresses library use and diversity research in library and information science (LIS), as well as the concept of super-diversity. In library and information science, diversity research is an active area of investigation for both prac-
tioners and LIS professors. Most relevant to this paper are studies related to diversity and library usage. Diversity research is often paired with analysis of demographic data, such as age, gender, ethnicity, race, and student status. Many studies look at demographics and library use. An article by Gail Herrera examines race and gender and collection use data at the University of Mississippi. Herrera found a gender difference, with women using the library and electronic resources more than men; no significant gender differences were found in the physical checkout of library items. Herrera also found that African American students used the library collection more than other minority groups. More specifically, African American undergraduates used electronic resources more than other minority groups.

In a 2013 study, Graham Stone and Ellen Collins analyzed a large sample of 33,074 students in their Library Impact Data Project, finding that “many of the tests did not show statistical significance, and those that did tended to show relatively small effect sizes.” They pointed out that “both black and Asian students show more library visits and PC usage than white students, and that a higher proportion of their e-resource use occurs on campus.” Stone and Collins also discuss how other studies attempting to find demographic patterns in library usage yielded inconsistent results, citing two other studies that contradicted the findings they reported. While ethnicity shows some relationship to library usage, Stone and Collins identify that country of residence seems to be an important factor:

Tables 5 and 6 suggest that country of domicile is more important than ethnicity in its relationship with library usage. This makes sense; it seems likely that students in different regions will receive different early training on how to find and use information resources, and that the cultural differences in this learned behavior are perhaps more important than differences between ethnic groups. The synergy between the results for ethnically Chinese students and students whose country of residence is China is striking.

Using country of origin as a point of departure for analysis is interesting because students who recently arrived in the United States bring with them their cultural assumptions about college and academic work.

In a study of first-year college students, Krista Soria, Shane Nackerud, and Kate Peterson found many instances of significant demographic patterns in library use, with female first-year students, international students, ESL (English as a second language) students, and Asian students all showing statistically significant differences in their use of library resources. Looking at the differences between whites and Latinos in library use, Katherine Dabbour and James Ballard found no significant differences between the two groups, noting that “while more white survey respondents accessed the internet from home than Latino respondents, Latino respondents used the physical library more than white respondents did for studying as well as using computers to access e-mail or software.”

Ethelene Whitmire’s analysis of Indiana University’s 1996 College Student Experiences Questionnaire revealed differences in usage patterns by race looking at such categories as “white” and “students of color.” While these data are old, and library use has changed greatly since 1996, the demographic differences in usage echo Stone and Collins’s findings in that “most effect sizes remain small.”
A 2013 study by Shane Nackerud, Jan Fransen, Kate Peterson, and Kristen Mastel comparing differences in library usage between undergraduate and graduate students again showed that student status is connected to differences in usage. The researchers found significant variations in undergraduate versus graduate usage of both digital resources and library workstations.18

A study by Andrea Japzon and Hongmian Gong of public library use in New York City showed that, in addition to such factors as race, income, and education, circulation usage is also affected by spatial considerations. The authors explain:

The neighborhood analysis approach used in this research is also an improvement on the way that public library use was traditionally studied. It emphasizes the interaction of various neighborhood characteristics and its joined influence on public library use, rather than the influence of each single demographic, economic, cultural, or spatial factor.19

In the data collected for the current paper, the spatial factor seems to play a strong role in the library use of foreign-born students who study at Brooklyn College Library and who also use the Central Branch of the Brooklyn Public Library because both libraries are just a few stops apart on the same subway and bus lines.

These studies all touch on analyzing demographics that are investigated in the current study. The current study, however, looks exclusively at foreign-born students, making it a unique diversity sample of immigrant students and international students, especially when viewed through the lens of super-diversity, a concept outlined by Steven Vertovec in his 2007 paper on the topic.20 Super-diversity is a way of understanding diversity by focusing on an increase in diversity both between and among groups, and on complex interactions between the following factors within immigrant groups: “countries of origin, multilingualism, religion, workers (labor), students, asylum-seekers and refugees, gender, age, and transnationalism.”21 According to Vertovec, “One of the most noteworthy features of the new migration’ is the multiplicity of immigrants’ countries of origin.”22

The current study involved students from 44 countries who spoke 38 different languages—ranging from Arabic to Polish to Trinidadian Creole—with varying levels of proficiency and multilingualism. The variation in countries of origin and languages among this study’s population is like the variation Vertovec shows in his tables.23 Vertovec explains:

While pointing to important indicators of diversity, country of origin data itself, however, may mask more significant forms of differentiation than it reveals. Within any particular population from a given country, there will be important distinctions with reference to ethnicity, religious affiliation and practice, regional and local identities in places of origin, kinship, clan or tribal affiliation, political parties and movements, and other criteria of collective belonging.24
Super-Diversity and Foreign-Born Students in Academic Libraries: A Survey Study

The analysis in the following sections looks at library use through the various lenses of identities and statuses, including gender, ethnicity, and immigration status, to see how the super-diverse patterns complement or contradict trends in usage. Sociologist Paolo Boccagni remarks that using super-diversity as an analytical lens evokes “the idea of intersectionality, developed in feminist thinking, [which] is highly relevant in a context of increased diversity within diversity.” Super-diversity represents an intensified migration pattern in such urban areas as New York City and London, and it connects migration to the idea than an individual is an intersection of multiple identities. Such intersections result from globalization, transnationalism, and the proliferation of communications technology. Everyone comes from everywhere, and social ties can be maintained through technology. Therefore, the author agrees with Boccagni that it is important to develop a theoretical perspective that resists “essentializing” ethnicity, culture, gender, language, and other forms of identity. By adopting super-diversity as an approach in studying foreign-born populations, this study embraces complexity and carries with it “a range of significant public service implications.”

Methodology

With approval from the City University of New York Institutional Review Board, and using a small grant awarded by the Professional Staff Congress of the City University of New York, the author hired a research assistant to help recruit survey participants and collect data during the fall 2014 semester. To recruit participants, the researchers distributed throughout the campus of Brooklyn College flyers advertising the study with a link to the screening survey. The researchers also staffed an informational table about the survey in various spaces around the campus, including the library. Several offices agreed to promote the survey on their Facebook pages and their mailing lists, including the Women’s Center, the Office of Graduate Admissions, and the Office of Student Activities.

Population and Data Collection Procedures

To participate, students first needed to complete an online screening survey. The author deployed the online questionnaire on SurveyMonkey, a survey software program. The screening questionnaire collected demographic and educational background information that allowed the researchers to ensure participants were foreign-born and were either undergraduate or graduate students at Brooklyn College.

Qualifying participants received an e-mail with a link to the full survey within two days of completing the screening questionnaire. The full survey, also available via SurveyMonkey, took 30 to 40 minutes to complete and was divided into five parts (demographics, educational background, language use, library use, and cultural questions).

Because the survey was linked to their e-mail, respondents could finish one part of the survey and return to it at another time to complete the other parts. The researchers sent out e-mails to remind participants that they needed to complete the full survey. Once SurveyMonkey indicated that a participant’s survey was complete, the researchers made an appointment with the student via e-mail to distribute the $10 incentive.
The researchers also provided participants with the option of doing an in-person survey, in which the researcher would help the participant complete the survey in a classroom and then the student would immediately receive the incentive, though none of the participants chose this option. Below is a summary of the survey population and convenience sample used for this study:

- There were 3,004 foreign-born students (384 indicated they have F-1 Visas, meaning that they have temporary immigration status) at Brooklyn College in fall 2014.28
- 274 students were screened.
- 123 eligible students were invited to participate in the study.
- 103 students participated.
- 10 surveys contained partial responses and were discarded.
- 93 surveys were complete with no missing responses.
- One complete survey was discarded because the respondent self-reported poor reading and writing ability in English.
- 92 complete surveys were analyzed (confidence level 95 percent; margin of error 10 percent).29

**Constructing Independent and Dependent Variables from Survey Data**

The analysis in this paper focuses on the data from the library use section of the survey. The items for the library use section were adapted from the University of Washington’s generic In Library Use Survey Instrument. Respondents were asked to quantify the frequency of their library use using a Likert-type scale coded as 1 = Never to 6 = Always. Respondents were asked about their city University of New York (CUNY) Libraries use and their public library use to see if there were any common trends or noticeable differences between academic library use and public library use based on their demographic answers.

Nineteen survey questions pertained to CUNY Libraries use. Twenty-two questions pertained to public library use (the final three of these questions were specific to public libraries and were not asked about CUNY Libraries). These questions are listed in the Appendix.

The relevant survey questions were coded as dependent variables. The author analyzed the dependent variables related to library use in Excel, and then in SPSS 21. Independent samples t-tests were conducted to look for differences in mean in academic and public library usage based on the following independent variables: student status (undergraduate or graduate), immigration status (permanent status, indicating the traditional category of “immigrant student,” or temporary status, denoting the traditional category of “international student”), first-generation student status, gender, race, and ethnicity, as well as age, age of arrival in the United States, years in the United States, and median income based on ZIP Code. Binary independent variables were dummy coded using 1 = attribute and 0 = lack of the attribute. For example, men were coded 0 = not man, 1 = man, and temporary immigration status was coded 0 = not temporary, 1 = temporary. Figure 1 shows the total number of respondents sorted by binary variables, those with only two values.
Figure 1. Number of respondents in this study sorted by binary variables (those with only two values), \(N = 92\)

Figure 2. The race and ethnicity of survey respondents (\(N = 92\))

Figure 2 shows the race and ethnicity of survey respondents.

**Statistical Analysis**

The author selected Somers’ d statistical test to look for associations between library use and four independent variables (age, age arrived in the United States, years lived
Median income was estimated from the U.S. Census Bureau’s 2014 American Community Survey using respondent ZIP Codes.32 t-tests were not conducted for grouping variables that had fewer than 10 respondents (for example, there were only five respondents who identified as Hispanic and two respondents who regarded themselves as Middle Eastern).

Table 1 shows the mean, median, mode, and range for the population’s age, age arrived in the United States, years living in the United States, and median income of ZIP Code area. The respondent population is young, in their late teens and early twenties. The distribution of how young these students arrived in the United States and how long they have been living in the United States shows that there is a large range, with the most frequent (mode) responses being arrival in their 20s and having lived in the United States for a year.

<table>
<thead>
<tr>
<th>Age</th>
<th>Age arrived in the United States</th>
<th>Years living in the United States</th>
<th>Median income using ZIP Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>24.72</td>
<td>Mean 15.17</td>
<td>Mean 9.54</td>
</tr>
<tr>
<td>Median</td>
<td>23</td>
<td>Median 16.5</td>
<td>Median 8</td>
</tr>
<tr>
<td>Mode</td>
<td>18</td>
<td>Mode 20</td>
<td>Mode 1</td>
</tr>
<tr>
<td>Range</td>
<td>38</td>
<td>Range 48</td>
<td>Range 29</td>
</tr>
</tbody>
</table>

The results section examines the 87 academic library users and 68 public library users who completed the survey, beginning with student status, first-generation college student status, immigration status, gender, race, and ethnicity, and ending with a presentation of the statically significant associations. Table 2 shows the top five median CUNY and public library usage responses sorted by the highest mean usage, where “1” represents never doing an activity or using a resource and “6” indicates always doing an activity or using a resource. For each question, respondents could also respond “does not apply to me,” which affects the N count because questions with this answer were counted and coded in SPSS as a missing response.

Public library usage ranking has lower mean, median, and modes than the rankings in CUNY Libraries usage. This indicates that, given the choice, these students report using CUNY services more often. Table 3 shows the statistically significant findings for the CUNY and public library use for graduate versus undergraduate students and for respondents with first-generation college student status versus those without.
Table 2.
Comparison of top uses of academic and public libraries

<table>
<thead>
<tr>
<th>Rank</th>
<th>City University of New York (CUNY) Libraries usage</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Rank</th>
<th>Public library usage</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I print in CUNY Libraries.</td>
<td>87</td>
<td>5.2</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>I get help from the public library staff to borrow or return library items.</td>
<td>68</td>
<td>3.75</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I use CUNY Libraries as a place to study.</td>
<td>87</td>
<td>5.16</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>I go to the public library to access print books, magazines, journals, and newspapers.</td>
<td>68</td>
<td>3.54</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>I use CUNY Libraries’ computers.</td>
<td>87</td>
<td>5.07</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>I use the public library as a place to study.</td>
<td>68</td>
<td>3.44</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>I find textbooks for class at CUNY Libraries.</td>
<td>87</td>
<td>4.69</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>I use the public library’s Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.</td>
<td>68</td>
<td>3.4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>I use CUNY Libraries’ Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.</td>
<td>85</td>
<td>4.53</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>I print at the public library.</td>
<td>68</td>
<td>3.4</td>
<td>3.5</td>
<td>1</td>
</tr>
</tbody>
</table>
# Table 3
City University of New York (CUNY) and public library use for graduate versus undergraduate students and for respondents with first-generation college status versus those without

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>N</th>
<th>Mean</th>
<th>p-value*</th>
<th>MD†</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use CUNY Libraries’ Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.</td>
<td>graduate</td>
<td>14</td>
<td>3</td>
<td>0.05</td>
<td>1.831</td>
</tr>
<tr>
<td></td>
<td>undergraduate</td>
<td>71</td>
<td>4.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I go to CUNY Libraries to access PRINT books, magazines, journals, and newspapers.</td>
<td>graduate</td>
<td>14</td>
<td>3.79</td>
<td>0.021</td>
<td>0.848</td>
</tr>
<tr>
<td></td>
<td>undergraduate</td>
<td>71</td>
<td>4.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I go to CUNY Libraries to access ELECTRONIC books, magazines, journals, and newspaper.</td>
<td>graduate</td>
<td>14</td>
<td>3.29</td>
<td>0.025</td>
<td>0.971</td>
</tr>
<tr>
<td></td>
<td>undergraduate</td>
<td>70</td>
<td>4.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I print in CUNY Libraries.</td>
<td>graduate</td>
<td>14</td>
<td>4.86</td>
<td>0.05</td>
<td>0.403</td>
</tr>
<tr>
<td></td>
<td>undergraduate</td>
<td>73</td>
<td>5.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get help from the public library staff to borrow or return library items.</td>
<td>graduate</td>
<td>10</td>
<td>3.3</td>
<td>0.028</td>
<td>0.528</td>
</tr>
<tr>
<td></td>
<td>undergraduate</td>
<td>58</td>
<td>3.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make photocopies at the public library.</td>
<td>graduate</td>
<td>10</td>
<td>3.1</td>
<td>0.024</td>
<td>0.566</td>
</tr>
<tr>
<td></td>
<td>undergraduate</td>
<td>58</td>
<td>2.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I go to the public library to take English language classes.</td>
<td>graduate</td>
<td>10</td>
<td>1</td>
<td>0.001</td>
<td>0.633</td>
</tr>
<tr>
<td></td>
<td>undergraduate</td>
<td>49</td>
<td>1.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I go to CUNY Libraries to access ELECTRONIC books, magazines, journals, and newspapers.</td>
<td>first generation</td>
<td>19</td>
<td>4.05</td>
<td>0.026</td>
<td>0.055</td>
</tr>
<tr>
<td></td>
<td>not first generation</td>
<td>65</td>
<td>4.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use CUNY Libraries’ websites to access ELECTRONIC books, magazines, journals, and newspapers.</td>
<td>first generation</td>
<td>19</td>
<td>4.32</td>
<td>0.052</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>not first generation</td>
<td>65</td>
<td>4.25</td>
<td></td>
<td></td>
</tr>
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</table>
Table 3., cont.

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>N</th>
<th>Mean</th>
<th>p-value*</th>
<th>MD†</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use CUNY Libraries as a place to study.</td>
<td>first generation</td>
<td>19</td>
<td>5.58</td>
<td>0.028</td>
<td>0.535</td>
</tr>
<tr>
<td></td>
<td>not first generation</td>
<td>68</td>
<td>5.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use CUNY Libraries as a place to meet friends.</td>
<td>first generation</td>
<td>18</td>
<td>4.94</td>
<td>0.009</td>
<td>1.562</td>
</tr>
<tr>
<td></td>
<td>not first generation</td>
<td>68</td>
<td>3.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use the public library as a place to work with other people.</td>
<td>first generation</td>
<td>10</td>
<td>2.7</td>
<td>0.038</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>not first generation</td>
<td>58</td>
<td>2.62</td>
<td></td>
<td>2.62</td>
</tr>
</tbody>
</table>

*p is an estimate of the probability that the result occurred by statistical accident. A low level of p (≤ 0.05) indicates a high level of statistical significance.
† MD is the mean difference between the mean scores of the independent variable. For example, in the first data row, graduate students reported a 3 (out of 6), while undergraduates reported a much higher level (4.83) of using CUNY Wi-Fi for their mobile devices. That is a mean difference of 1.83 between the groups.
There were statistically significant findings connected to library usage based on student status and first-generation college student status. This paper reports only results that are statistically significant—that is, results that have $p$ values that are $p \leq 0.05$ for the independent samples $t$-tests. Additionally, only large mean differences (indicated as MD) with values $\geq 0.5$ will be examined in the “Discussion” section because it is difficult to interpret the significance of small differences in means, especially with this sample. For example, on the scale of 1 to 6, with 1 representing “never” and 6 representing “always,” a large difference in means indicates that the two groups being compared responded very differently, as readers will note with graduate and undergraduate students reporting their use of Wi-Fi for their mobile devices in Table 3. The mean response for graduate students is 3, the middle point of the scale, while undergraduates report at the more frequent level of 4.83. The mean difference is the difference between the values $(4.83 - 3 = 1.83)$.

No statistically significant effects were found connected to immigration status (permanent versus temporary). The author was surprised by this finding. Table 4 shows statistically significant findings in library use for gender, race, and ethnicity.

Table 5 shows the statistically significant results related to age, age arrived in the United States, years in the United States, and median income, based on the Somers’ d statistical test. Most associations were weak ($d < 0.30$, where $d$ values of –1 and 1 represent perfect association).

In general, public and academic libraries are well used by foreign-born students. Students also have a positive outlook with regard to the library and its services. This positive opinion is reinforced in Figures 3 and 4, which tally the free-text comments provided by respondents when asked the following questions:

1. Please list five words that best describe CUNY Libraries.
2. Please list five words that best describe public libraries.

Figure 3 is a word cloud showing the most frequently occurring adjectives reported by survey respondents when asked about CUNY Libraries. This figure was made with a corpus of responses totaling 844 total words and 298 unique word forms. The most frequent words in the corpus were quiet (37); helpful (35); great (22); place (22); and useful (17). The corpus is evidence that the library is an important location that the students rely on for social and academic activities. Below are some selected responses from the corpus referring to CUNY Libraries spaces:

Great place to hang out with friends.
Great place to get help with research.
Amazing in their support for student research.
Table 4.
City University of New York (CUNY) and public library use by gender, race, and ethnicity

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>N</th>
<th>Mean</th>
<th>p-value*</th>
<th>MD†</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get help from CUNY Libraries staff to borrow or return library items.</td>
<td>men</td>
<td>18</td>
<td>3.83</td>
<td>0.041</td>
<td>0.696</td>
</tr>
<tr>
<td></td>
<td>women</td>
<td>68</td>
<td>4.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make photocopies at CUNY Libraries.</td>
<td>men</td>
<td>19</td>
<td>3.47</td>
<td>0.032</td>
<td>0.434</td>
</tr>
<tr>
<td></td>
<td>women</td>
<td>65</td>
<td>3.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use the public library as a place to eat.</td>
<td>men</td>
<td>11</td>
<td>2.36</td>
<td>0.001</td>
<td>0.911</td>
</tr>
<tr>
<td></td>
<td>women</td>
<td>53</td>
<td>1.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find textbooks for class at CUNY Libraries.</td>
<td>Asian</td>
<td>36</td>
<td>4.94</td>
<td>0.04</td>
<td>0.435</td>
</tr>
<tr>
<td></td>
<td>not Asian</td>
<td>51</td>
<td>4.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use CUNY Libraries’ Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.</td>
<td>Asian</td>
<td>36</td>
<td>4.92</td>
<td>0.045</td>
<td>0.672</td>
</tr>
<tr>
<td></td>
<td>not Asian</td>
<td>49</td>
<td>4.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use CUNY Libraries as a place to study.</td>
<td>Asian</td>
<td>36</td>
<td>5.39</td>
<td>0.033</td>
<td>0.389</td>
</tr>
<tr>
<td></td>
<td>not Asian</td>
<td>51</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use tools provided by CUNY library such as projectors, whiteboards, and laptops</td>
<td>Asian</td>
<td>35</td>
<td>3.77</td>
<td>0.005</td>
<td>0.855</td>
</tr>
<tr>
<td></td>
<td>not Asian</td>
<td>48</td>
<td>2.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I print in CUNY Libraries.</td>
<td>Asian</td>
<td>36</td>
<td>5.69</td>
<td>0.001</td>
<td>0.851</td>
</tr>
<tr>
<td></td>
<td>not Asian</td>
<td>53</td>
<td>4.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use CUNY Libraries to find textbooks for class.</td>
<td>not white</td>
<td>74</td>
<td>4.78</td>
<td>0.012</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>white</td>
<td>13</td>
<td>4.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Independent variable</td>
<td>N</td>
<td>Mean</td>
<td>p-value*</td>
<td>MD†</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>----</td>
<td>------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>I print in CUNY Libraries.</td>
<td>not white</td>
<td>74</td>
<td>5.36</td>
<td>0.006</td>
<td>1.134</td>
</tr>
<tr>
<td></td>
<td>white</td>
<td>13</td>
<td>4.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use CUNY Libraries as a place to study.</td>
<td>not white</td>
<td>74</td>
<td>5.38</td>
<td>0.02</td>
<td>1.455</td>
</tr>
<tr>
<td></td>
<td>white</td>
<td>13</td>
<td>3.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use the CUNY Libraries as a place to work with other people.</td>
<td>not other‡</td>
<td>72</td>
<td>4.35</td>
<td>4.871</td>
<td>0.862</td>
</tr>
<tr>
<td></td>
<td>other</td>
<td>14</td>
<td>4.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p is an estimate of the probability that the result occurred by statistical accident. A low level of p (≤ 0.05) indicates a high level of statistical significance.
† MD is the mean difference between the mean scores of the independent variable. For example, in the first data row, men reported a 3.83 (out of 6), while women reported a much higher level (4.83) of getting help from CUNY Libraries staff. That is a mean difference of 0.696 between the groups.
‡The values mean that 14 people self-identified as “other” and 72 people self-identified as “not other,” meaning that they chose some form of ethnic identification besides the “other” option.
### Table 5.
Age arrived in the United States, years living in the United States, and median income

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>d*</th>
<th>p-value†</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use CUNY Libraries’ Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.</td>
<td>Age</td>
<td>–0.262</td>
<td>0.009</td>
</tr>
<tr>
<td>I use CUNY Libraries as a place to meet friends.</td>
<td>Age</td>
<td>–0.225</td>
<td>0.007</td>
</tr>
<tr>
<td>I use CUNY Libraries as a place to eat.</td>
<td>Age</td>
<td>–0.218</td>
<td>0.03</td>
</tr>
<tr>
<td>I use tools provided by CUNY Libraries, such as projectors, whiteboards, and laptops.</td>
<td>Age</td>
<td>–0.196</td>
<td>0.028</td>
</tr>
<tr>
<td>I use the public library’s Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.</td>
<td>Age</td>
<td>–0.349</td>
<td>0.001</td>
</tr>
<tr>
<td>I get help from the public library staff to find books, documents, magazines, and journals.</td>
<td>Age</td>
<td>–0.202</td>
<td>0.037</td>
</tr>
<tr>
<td>I print at the public library.</td>
<td>Age</td>
<td>–0.185</td>
<td>0.024</td>
</tr>
<tr>
<td>I use CUNY Libraries’ Wi-Fi connection on my laptop.</td>
<td>Age arrived in the United States</td>
<td>–0.266</td>
<td>0.003</td>
</tr>
<tr>
<td>I use CUNY Libraries’ Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.</td>
<td>Age arrived in the United States</td>
<td>–0.292</td>
<td>0.003</td>
</tr>
<tr>
<td>I use CUNY Libraries as a place to meet friends.</td>
<td>Age arrived in the United States</td>
<td>–0.23</td>
<td>0.008</td>
</tr>
<tr>
<td>I use CUNY Libraries as a place to eat.</td>
<td>Age arrived in the United States</td>
<td>–0.336</td>
<td>0.001</td>
</tr>
<tr>
<td>I use tools provided by CUNY Libraries, such as projectors, whiteboards, and laptops.</td>
<td>Age arrived in the United States</td>
<td>–0.184</td>
<td>0.047</td>
</tr>
<tr>
<td>I use scanners at CUNY Libraries.</td>
<td>Age arrived in the United States</td>
<td>–0.193</td>
<td>0.035</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Independent variable</td>
<td>d*</td>
<td>p†</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>I use CUNY Libraries’ computers.</td>
<td>Years lived in the United States</td>
<td>0.22</td>
<td>0.013</td>
</tr>
<tr>
<td>I go to CUNY Libraries to access ELECTRONIC books, magazines, journals, and newspapers.</td>
<td>Years lived in the United States</td>
<td>0.247</td>
<td>0.003</td>
</tr>
<tr>
<td>I use CUNY Libraries’ websites to access ELECTRONIC books, magazines, journals, and newspapers.</td>
<td>Years lived in the United States</td>
<td>0.22</td>
<td>0.012</td>
</tr>
<tr>
<td>I go to CUNY Libraries to access ELECTRONIC books, magazines, journals, and newspapers.</td>
<td>Median income</td>
<td>–0.155</td>
<td>0.054</td>
</tr>
<tr>
<td>I print in CUNY Libraries.</td>
<td>Median income</td>
<td>–0.182</td>
<td>0.05</td>
</tr>
</tbody>
</table>

*Somers’ d is a measure of the direction and strength of the relationship between two variables.
†p is an estimate of the probability that the result occurred by statistical accident. A low level of p (≤ 0.05) indicates a high level of statistical significance.
Comprehensive in their collections of textbook[s].
Great places for reading and doing homework.
Organized, neat, and the availability of cold drinking water.
Helpful librarians.

Figure 4 is a word cloud showing the most frequently occurring words describing public libraries, most of which are positive. The response corpus for the public library question used to form the word cloud contains 597 total words and 271 unique word forms. The most frequent words in the corpus were helpful (29); quiet (19); place (12); resourceful (12); and useful (12).

The range of comments was greater in the public library data:

A great help for immigrants as a starting point to learning the American culture.
Convenient for working in groups.
A place to go when you need to escape your stressful life.
Really makes you do your homework.
A good place to spend time.

While the comments about CUNY Libraries tended to focus on the library as a place to do academic work, such as researching, studying, and finding textbooks, comments about public libraries included mention of their usefulness for nonacademic activities, such as a place to spend time away from home and to access citizenship material. In both corpora, there were complaints about slow Internet and noisy patrons, which cannot be seen in the word clouds.

Discussion

Considering all the data, the library is an important physical space that serves a variety of academic and nonacademic needs. Figures 3 and 4 show that students have a positive view of libraries as a space that is not only for academic tasks but also a safe social space that helps students during times of stress, and where different kinds of leisure and academic learning take place.

Comparing usage between the two types of libraries, the data in Table 2 show that these students do essentially the same things in both public and academic library spaces: studying, borrowing items, using Wi-Fi, and printing. There is less intensity of use in public libraries for the same activities as indicated by the mode, which is 6 for academic libraries and 4 for public libraries. It is hard to say if these patterns are complementary; more qualitative work is needed. A complementary pattern would show one kind of activity done in one location more frequently than another, but this pattern was not found in the current data.

Furthermore, the patterns indicate that, for these students, the public library serves as a secondary facility and not the primary library for academic activities. The author was surprised to find these lower levels of public library use because the central branch

Students do essentially the same things in both public and academic library spaces: studying, borrowing items, using Wi-Fi, and printing.
Figure 3. A word cloud showing the adjectives most frequently used by respondents when asked about City University of New York Libraries.

Figure 4. A word cloud showing the adjectives most frequently used by respondents when asked about public libraries.
of the Brooklyn Public Library and Brooklyn College are on the same subway and bus lines. The public library has an eating area, classes, and workshops that focus on Microsoft software. Because the usage patterns mirrored each other, the author expected to find more intense usage in other areas related to educational usage as well (for example, finding textbooks, taking workshops, working in groups, or studying). However, the data failed to show intense usage in educational tasks for public libraries.

Student Status

Out of all the demographic groupings, student status produced the most complex results to interpret. The $t$-test results in Table 3 point to a trend that undergraduates are statistically more likely to prefer using public libraries than graduate students. Undergraduates report more statistically significant usage of public libraries for making photocopies ($MD = 0.8, p = 0.02$), taking English language classes ($MD = 0.63, p = 0.001$), and checking out and returning items from circulation ($MD = 0.528, p = 0.03$). Undergraduates are much more likely than graduate students to use Wi-Fi with mobile devices at CUNY ($MD = 1.831, p = 0.05$). Another interesting statistic is that undergraduates are more likely to access e-resources on-site than are graduate students ($MD = 0.971, p = 0.03$). More qualitative work would need to be done to establish the reasons for this.

One potential reason for this pattern of heavy on-site access is that, in many countries outside of Western Europe and North America, access to subscription-based resources is usually limited to on-site, based on conversations the author has had with librarians at international conferences. Undergraduate students may assume that the situation is the same in the United States. This is just speculation, but it seems plausible because students could have reported a higher use of these resources remotely, but did not. Also, space is difficult to find in Brooklyn and population density is high, so libraries may function as another space away from crowded apartments and multigenerational family living spaces. This study did not have a statistically significant finding for undergraduates and computer workstation use, contrary to Nackerud, Fransen, Peterson, and Mastel’s findings that undergraduates use workstations at a higher rate than graduate students.

Immigration Status

The author was surprised to find no statistically significant differences between students with permanent immigration status and temporary status. Public libraries, especially Brooklyn Public Library, have a strong outreach to immigrant communities, so the author was surprised that immigrant students (foreign-born students with permanent status) did not differ in any significant ways from their international student counterparts (foreign-born students with temporary status). This study cannot confirm Soria, Nackerud, and Peterson’s findings in resource usage patterns between international students and immigrant students. This may be because the Soria team’s data are based on actual usage, rather than self-reported usage. In the
author’s opinion, actual usage data are more reliable than self-reported data, which will be discussed further in this paper’s “Limitations” section.

First-Generation Students

One striking finding for first-generation college students is that they are more likely ($p = 0.01$) to meet friends at CUNY Libraries, with a very large mean difference of 1.562 compared to non-first-generation students. Without further qualitative work, it would be difficult to understand the meaning of this statistic. The size of the mean difference suggests to the author that first-generation students define the physical academic library as a social space rather than a formal space, although that needs to be confirmed through qualitative work. The next significant ($p = 0.04$) mean difference is a much smaller value ($MD = 0.535$) when first-generation students report that they use CUNY Libraries as a study space. This means that first-generation students will more often use the academic library as a social and study space than students who are not first-generation college students. The other $t$-test results, although significant, have very small mean differences.

Gender

As shown in Table 4, the $t$-tests for gender revealed some interesting findings, with the largest mean difference ($MD = 0.911, p = 0.001$) showing that men are more likely than women to eat at public libraries; keep in mind that the behavior is reported as low overall (men $M = 2.36$, women $M = 1.45$). Women borrow or return items more frequently ($MD = 0.696, p = 0.004$). One implication of this is that photocopiers should be placed in safe areas in the library.

This study showed no gender difference in resource usage, such as borrowing books, reading e-books, and using e-resources, as Soria and her colleagues found in their study. This study also failed to find the gender differences that Herrera observed in the uses of library and “electronic resources” and the “physical checkout of library items.”

Race and Ethnicity

Table 4 shows that a large majority of the survey respondents self-identified as Asian. The largest and unique mean differences in library use between Asian and non-Asian are the usage of tools at CUNY Libraries ($MD = 0.855, p = 0.001$) and printing at CUNY Libraries ($MD = 0.851, p = 0.001$). Asian students are statistically more likely to use these services than other ethnic populations. The printing statistic shows that the Asian mean is 5.69 compared to the non-Asian mean of 4.24, indicating that the population who self-identified as Asian “almost always” prints at the library. Printing is a labor- and resource-intensive function for most libraries to offer in terms of maintaining the printers and software and answering questions about printing, but it is clearly important to this population.

The number of black or African American respondents was small ($N = 16$), so no $t$-tests were used. As a population, black or African American students’ top five usage categories do not differ markedly from those of the full population. This study did not confirm Herrera’s finding that African Americans students had the highest usage of all minority groups of the library collection.
For white foreign-born students, the independent samples t-tests revealed that non-white students are much more likely to study at CUNY Libraries, with MD for nonwhite and white at 5.12 and 4.23, respectively ($p = 0.002$). This is a large mean difference of 1.45.

This study did find a statistically significant finding (MD for white versus nonwhite is 1.455, $p = 0.002$) that supports Whitmire’s findings that students of color studied more in the library. The data in this survey support some of the findings that Stone and Collins report when they observe that students of color show more library personal computer usage than white students (mean usage for nonwhite students and white students is 5.12 and 4.77 respectively, but this pattern was not statistically significant). The same can be seen in printing, with a 1.134 mean difference for nonwhite and white (5.36 and 4.15 respectively, $p = 0.001$). Foreign-born students of color will more likely use the academic library as a place to study than white foreign-born students will. The other statistical differences for white and nonwhite are not as large as these two differences.

**Foreign-born students of color will more likely use the academic library as a place to study than white foreign-born students will.**

**Somers’ d Associations**

Statistically significant associations ($p \leq 0.05$) are reported in Table 5. Associations measure the direction and strength of relationships between two variables, which are shown in the $d$ column. However, associations tell us nothing more than that. The moderate associations of $d > 0.3$ are probably the most interesting to discuss, and the author will ignore the weaker associations below $d = 0.3$.

Some associations are logical—for example, the association between age and the use of Wi-Fi for mobile devices, which has a negative value ($-0.0349$), meaning that the relationship is inverse. The younger the age, the more frequently using Wi-Fi for mobile devices is reported. The assumption is that younger people will more likely use mobile devices. More follow-up work could establish some clearer patterns of why this is the case. In the author’s library, he has observed a pattern of mobile devices being used in tandem with desktop computers in the computer labs.

It seems that students who will more likely eat at the library in this population also arrived in the United States at younger age. The strength of the relationship is moderate ($-0.336$). It is hard to know why this is, but it may a more common cultural norm to eat in public spaces in the United States; more qualitative work would need to be done to understand this. It would have been encouraging if the same pattern was reported by the respondents in public libraries, but the pattern is not there. Clearly, choices about where to eat are cultural. For libraries with a large foreign-born population that offer eating spaces, this is an important factor to investigate.

**Super-Diversity**

Super-diversity, as it relates to the public services that libraries provide, forces us to examine and disaggregate complex and intersectional relationships through careful organizational research. By analyzing severable variables and seeing which would be
statistically significant, this study attempted a super-diverse approach to library use behaviors. While there were no statistically significant findings in immigration status, the descriptive statistics will need to be analyzed for this variable so that it can be improved. Gender, race, and ethnicity revealed some interesting findings, especially in the categories of Asian and nonwhite library users. If this study had investigated only one variable, such as immigration status, we would not have learned about some of the usage differences in gender, ethnicity, first-generation status, and student status. It would be interesting to see how those patterns evolve over time.

For now, the data have implications for outreach and service if we consider the ACRL Diversity Standards, which are based on the “2001 National Association of Social Workers Standards for Cultural Competence in Social Work Practice.” Boccaglì’s article on super-diversity and social work provides a starting place to create a culturally responsive organization that will require “organizational and professional resources—in terms of training, supervision, and workload allocation.” Similarly, it is important for libraries to consider how a theory like super-diversity can inform daily interactions with foreign-born patrons so that they can be a more culturally responsive.

Returning to the ACRL Diversity Standards, how can we use these data to increase our cross-cultural awareness of how immigration status, gender, race, and ethnicity affect our services? And the larger question is, how do cross-cultural data and the concept of super-diversity help us unpack some novel ways of looking at the complex behaviors of foreign-born students?

Diversity Standards as a Lens to Interpret Our Results

This section explores how five specific ACRL Diversity Standards (1, 2, 6, 9, and 11) can provide practical advice for innovating services to foreign-born students based on the results of this survey. Standard 1 is about cultural awareness, and it recommends that librarians should “recognize that normative behavior in one context may not be understood or valued in another context.” For example, foreign-born students and their parents may have different expectations of academic library services because of their past cultural experiences with libraries. Applying standard 1 to the data in this paper, librarians might create orientations to help foreign-born students understand the functions of public and academic libraries. The functions of these libraries may be different in the United States than in the students’ home countries. The functions of these libraries may be different in the United States than in the students’ home countries. The orientations could include speakers from the public library and show students how to find public library branches close their homes. In the author’s experience at the reference desk, students are sometimes confused about why academic libraries lack popular materials, and this discussion can introduce students to this very American typology of library service models.
Other cross-cultural awareness issues involve eating and appropriate places for socializing, and these issues may need to be carefully addressed by user studies, signage, and outreach in the areas where these activities take place. This could be a qualitative research project, especially if libraries are interested in what makes an appealing area in which to eat and socialize or a less attractive place in which to eat and socialize. For example, some cultures find it disgusting to eat next to trash bins; a group of students once told the author that the proximity of unlidded garbage cans made the experience like eating in a bathroom. Such information would help us understand statistical data on eating spaces in the library.

Understanding cultural norms of eating and socializing leads us to Standard 2, which focuses on developing specialized knowledge and understanding of the populations that use the library. The discussion of this standard recommends that librarians “identify service delivery systems or models that are appropriate to the targeted constituent groups.” This is clearly applicable to the printing statistic in this study: many who self-identified as Asian always print at the library. Analyzing a foreign-born student population in this manner can help libraries identify the importance of technology, such as printers that can print in the appropriate Unicode non-English fonts. If a library has a large foreign-born population, it may be a good idea that librarians gather more data on searching preferences and the scholarly resources that students used in their home countries. For example, do these students need bilingual academic dictionaries? Is there a free dictionary they can use online? Do students look up concepts in their own language version of Wikipedia? It is hard to guess at the kinds of resources these students need, so it is important to gather data on these needs and identify common requirements that the library can address.

Standard 6, on language diversity, is clearly an important standard to consider with students who are bilingual and have spent a considerable amount of time in libraries and educational institutions outside the United States. This study collects data about academic library usage tasks. In the author’s experience at the reference desk, students sometimes look for popular books and films in their first language, which public libraries often provide. Also related to this standard, the ACRL Diversity Standards Toolkit suggests the following:

- Library staff can compile lists to be kept on the reference desk of community resources for people of many identities. These resources could include public libraries, community resource centers, info shops, non-profits, and museums, in addition to crisis lines and emergency services.
- Librarians can gather information about the demographics of their campus and community and research case studies of services for those populations.37

Creating and referring students to appropriate language-related services, language access, and ethnolinguistic community resources are important aspects of recognizing the communities and services that are relevant to foreign-born students.

Closely related to this, Standard 9 focuses on cross-cultural leadership with a suggestion that libraries “develop and support a multiethnic/multicultural workforce to meet the needs of the constituency.”38 The data in this paper show that first-generation foreign-born college students often meet friends at the library.
staff and university faculty, in which the students see themselves reflected in the institution’s workforce, may increase how included foreign-born students feel. Culturally appropriate material, orientations, or both could help first-generation college students take full advantage of library services and other programming. Designing something culturally appropriate for first-generation students could be as simple as including brief translations of the library services, workshops, and events in commonly spoken non-English languages.

The most important standard to consider with foreign-born students is Standard 11, on research, which states that “research shall be inclusive and respectful of non-Western thought and traditional knowledge reflecting the value of cultural ways of knowing.”

For example, it is common in many Asian countries that the university purchases textbooks for students, so students from these countries may not anticipate the extra costs of books. For foreign-born students, the roles of librarians, and service models in general, may be very different in their home country than in the United States.

As librarians working with foreign-born populations, we should build services and outreach that are culturally appropriate and that recognize that some patrons come to our libraries without a sound understanding of United States academic libraries. American academic and public libraries are culturally specific in terms of language, organization, and service models. More research is needed to investigate services that are highly used and services that have low usage to determine if foreign-born populations are aware of a service (which may not have been available in their country) or look for a service that was offered in their country but does not exist in the United States.

According to the ACRL Diversity Committee, a new revision of the ACRL Diversity Standards is in progress. The general direction of the revisions includes updating the terminology to be more inclusive and responding to critiques of the current terminology. The committee hopes to include concepts from social justice, addressing such issues as oppression and decolonization. The committee is also interested in incorporating critical theory, as well as additional concepts from social work. Megan Watson reports that the committee will build on the definition of cultural competence and incorporate social work concepts such as “cultural humility” and “cultural resonance,” which “centers library services on the user’s experiences and perceptions.”

Having a diverse library staff and university faculty, in which the students see themselves reflected in the institution’s workforce, may increase how included foreign-born students feel.

Using a concept like super-diversity—which acknowledges the multidimensionality of demographic factors such as age, immigration status, ethnicity, and multilingualism—to understand foreign-born students gives librarians additional vocabulary to be more inclusive when studying library use and user perceptions of academic and public libraries.
Migration is an important social force affecting libraries today. As a result, using a concept like super-diversity—which acknowledges the multidimensionality of demographic factors such as age, immigration status, ethnicity, and multilingualism—to understand foreign-born students gives librarians additional vocabulary to be more inclusive when studying library use and user perceptions of academic and public libraries.

Limitations

Readers should be aware of limitations to this study. The first limitation is the treatment of Likert data as continuous variables. For guidance on this analysis, the author looked to other library studies that used Likert-type variables in t-tests and found Paul Alan Wyss’s study “Library School Faculty Members’ Perceptions Regarding Faculty Status for Academic Librarians”42 and the accompanying critique by Kristen Young. Young did not directly critique Wyss’s decision to treat a Likert-type variable as a continuous variable,43 so the author decided to continue this practice as a form of analysis accepted in our discipline, rather than using a statistical test that many librarian practitioners may find unfamiliar.

The second limitation is the nature of self-reported usage data. This analysis would be stronger if we analyzed it alongside actual usage data. In an ideal study, the most reliable way to gather these data would be to create a sampling frame from registrar data and do a survey that complements actual usage data, following up with focus groups to triangulate the results. Unfortunately, the author lacked the resources to pursue that research design. This leads to the third limitation: this is study is based on a convenience sample made up of students who were easy to reach with a 95 percent confidence interval and a 10 percent margin of error. Other limitations include the nature of the variables that the author aimed to capture. For example, median income was determined using the American Community Survey 2014 data by ZIP Code. This is not the best way to capture income data. Still, having some data and trying to understand the rough demographic implications for public services are important when approaching a super-diverse population requiring a more complex approach to understanding usage patterns. Like all research design, this study was limited by time, resources, and money.

The survey questions could use further rewriting and testing. However, the author did try to compensate for the wording and phrasing of survey questions by basing categories and themes on existing tools, which were cited in the methodology, and by pilot-testing the survey. The survey was pilot-tested with both librarians and foreign-born students. Many of the terms used throughout this article, including race, gender, ethnicity, and immigration status, are social science terms often used in survey research; their use is not meant to give offense or to intentionally exclude any groups. Some reductionism always occurs in survey-based research, and the author welcomes feedback on how to make the survey categories more inclusive.

Finally, the survey analysis would have benefited from questions about religious identity, about how many credits the student has completed, and about grade point average (GPA). The analysis would have also benefited if the survey was administered for more than one semester, with a larger sample, especially to confirm the initial findings on immigration status and library use. It is also important to note that correlation
is not causation. Researchers interested in continuing this work may want to design a study with variables at a level of measurement that could be used in a multiple regression to see which variable had the greatest effect on library use. In this author’s opinion, in addition to the statistical correlations, investigations using super-diversity as a lens would require both qualitative and quantitative data.

However, the author is content with how the data look and how the usage survey was designed to measure both public and academic library use so that comparisons could be made in how users interact with both. The author knew far more about survey design at the end of the project, after writing the analysis, than he did at the beginning. This is the natural process of the practitioner-researcher advancing skills and knowledge one project at a time. The author welcomes both feedback and suggestions for improving the survey questions.

Conclusion

Keeping in mind the limitations, several conclusions can be made by looking at foreign-born students, viewing library use through a lens of super-diversity. The data reveal that foreign-born students describe the academic library in a positive way. Furthermore, foreign-born students use the academic library more frequently than the public library, which serves as a secondary library for their academic work. Interestingly, the statistical analysis did not reveal any differences in library use for both kinds of libraries between students who had permanent and temporary immigration status. The data did find that, among the statistical relationships that exist in the demographic variable, student status, first-generation student status, and race and ethnicity yielded some statistically significant results. The results most meaningful to this author, and that in this author’s opinion merit more follow-up, include how first-generation students report using the academic library as a space to meet friends and study, and how students of color are statistically more likely to study in the academic library. Further qualitative work can shed some light on the experiences of these students in academic library spaces.

Future studies could investigate students’ use of public and academic libraries in more detail. In general, more mixed-method, longitudinal research investigating the relationship between public and academic library use by foreign-born students could create useful partnerships that benefit these populations and improve services.

While this study was being conducted, there was an initiative in which representatives of New York City public libraries came to CUNY Libraries to do outreach. It would be good to know which services CUNY students use in public libraries, and this survey represents an approach to capturing those kinds of data. Public librarians would likely be interested in these trends as well. The author would like to do further survey and focus groups investigating CUNY students’ use of public libraries. Based on the findings in this study, the author posits that it is not a question of the library being everything to everyone, but rather, of gathering enough data to understand what the appropriate mixture is to make sure that all populations are included in the planning of services.
Author would not hesitate to recommend cross-library training in public services between public and academic librarians. Public libraries have active immigrant outreach, while academic libraries tend to focus on international students. One of the author’s ongoing research goals is to develop a truly cross-cultural organization, mindful of multilinguals and respectful of other academic cultural research practices. It is not a question of the library being everything to everyone, but rather, of gathering enough data to understand what the appropriate mixture is to make sure that all populations are included in the planning of services.

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Appendix

Survey Questions Relevant to the Super-Diversity Study

CUNY Libraries Use Questions

1. I use CUNY Libraries’ computers.
2. I use CUNY Libraries’ Wi-Fi connection on my laptop.
3. I use CUNY Libraries’ Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.
4. I get help from CUNY Libraries staff to find books, documents, magazines, and journals.
5. I get help from CUNY Libraries staff to borrow or return library items.
6. I go to CUNY Libraries to access PRINT books, magazines, journals, and newspapers.
7. I go to CUNY Libraries to access ELECTRONIC books, magazines, journals, and newspapers.
8. I use CUNY Libraries’ websites to access ELECTRONIC books, magazines, journals, and newspapers.
9. I attend classes, workshops, and programs at the CUNY Libraries.
10. I use CUNY Libraries to find textbooks for class.
11. I use the CUNY Libraries as a place to work with other people.
12. I use CUNY Libraries as a place to study.
13. I use CUNY Libraries as a place to meet friends.
15. I use tools provided by CUNY Libraries, such as projectors, whiteboards, and laptops.
16. I make photocopies at CUNY Libraries.
17. I use scanners at CUNY Libraries.
19. I take my children to CUNY Libraries.

Public Library Use Questions

1. I use the public library’s computers.
2. I use the public library’s Wi-Fi connection on my laptop.
3. I use the public library’s Wi-Fi for my iPad, iPhone, Android phone, or other mobile device.
4. I get help from the public library staff to find books, documents, magazines, and journals.
5. I get help from the public library staff to borrow or return library items.
6. I go to the public library to access PRINT books, magazines, journals, and newspapers.
7. I use the public library’s websites to access ELECTRONIC books, magazines, journals, and newspapers.
8. I go to the public library and use their computers to access ELECTRONIC books, magazines, journals, and newspapers.
9. I use the public library to find textbooks for class.
10. I attend classes, workshops, or programs at the public library.
11. I use the public library as a place to work with other people.
12. I use the public library as a place to study.
13. I use the public library as a place to meet friends.
14. I use the public library as a place to eat.
15. I use tools provided by the public library, such as projectors and whiteboards.
16. I make photocopies at the public library.
17. I use scanners at the public library.
18. I print at the public library.
19. I take my children to the public library.
20. I use the public library to get a passport.
21. I go to the public library to take English language classes.
22. I use the public library to get help accessing tax forms.

Student Status Question

Are you a high school, undergraduate, or graduate student?

a. I am not a student [disqualify].
b. I am a high school student [disqualify].
c. I am an undergraduate student.
d. I am a graduate student.
Race and Ethnicity Question

Race and ethnicity categories were adapted from a White House document on reporting race.44

Please indicate your race:

a. Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race).

b. American Indian or Alaska Native (a person having origins in any of the original peoples of North and South America, including Central America, who maintains cultural identification through tribal affiliation or community attachment).

c. Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam).

d. Black or African American (a person having origins in any of the black racial groups of Africa).

e. Native Hawaiian or other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands).

f. White (a person having origins in any of the original peoples of Europe).

g. Middle Easterner (a person having origins from the Middle Eastern countries).

h. North African (a person having origins from the North African countries).

i. From multiple races.

j. Other (please specify).

Responses within the “other” category, which was a write-in category, included Guyanese, Jewish, Turkish, Caribbean, British Caribbean, and Bengali.

Immigration Status Questions

Two questions in the survey asked about immigration status. The first question was asked in the screening survey:

Are you an international student with one of the following visas: F, J, M, A, H1B, or K?

a. Yes

b. No

The second question was asked in the full survey:

What is your immigration status?

a. U.S. citizen

b. U.S. citizen by naturalization

c. Permanent resident

d. Not a U.S. citizen

e. Dual citizenship or nationality

f. Deferred Action for Childhood Arrivals (DACA)

g. I do not wish to answer this question

h. I don’t know

The author used responses to construct a variable called permanent and temporary in SPSS using the data, with answers A, B, C, and E indicating permanent status.
First-Generation College Students

First-generation college students were identified using the following question:
Ideally, what’s your intention for completing a degree? Check all that apply.

Nineteen answers were available, and respondents could choose as many as applied.
Answer L, “I am the first in my family to get a college degree,” was used to identify
first-generation college students.

Age, Age Arrived in the United States, and Years Lived in the United States

What year were you born?
What year did you come to live in the United States?

ZIP Code Question

What is your current ZIP Code?
ZIP Codes were recorded for respondents so that median income for ZIP Code
could be established.

Notes

8. Ibid., 769.
9. Ibid., 770.
10. Ibid.
12. Ibid., 8.
13. Ibid., 9.


21. Ibid., 1029–43.

22. Ibid., 1029.

23. Ibid., 1032.

24. Ibid., 1031.


26. Ibid., 610.


34. Ibid., 770.

35. ACRL, “Diversity Standards.”


38. Ibid.

39. ACRL, “Diversity Standards.”


41. Ibid.

43. Kristen Young, “Perceptions from Library School Faculty on Meaningful Matters to Academic Librarians: Additional Degrees, Sabbaticals, Evaluation, and Governance,” Evidence Based Library and Information Practice 6, 2 (2011): 44.

