March 2008

Student Characteristics and Use of Library Services in the University of Uyo

Anthonia E. Omehia  
*Rivers State College of Education, Rumuorlumeni, Port Harcourt, Nigeria*

Boma B. Obi  
*Rivers State College of Education, Rumuorlumeni, Port Harcourt, Nigeria*

Henry Itohowo  
*University of Uyo, Nigeria, alphonsus_okon@yahoo.com*

Follow this and additional works at: [http://digitalcommons.unl.edu/libphilprac](http://digitalcommons.unl.edu/libphilprac)

*Part of the [Library and Information Science Commons](http://digitalcommons.unl.edu/libphilprac)*
Student Characteristics and Use of Library Services in the University of Uyo

Anthonia E. Omehia, PhD  
Boma B. Obi, PhD  
Henry Itohowo Okon  
Rivers State College of Education  
Rumuorlumeni, Port Harcourt, Nigeria  
Department of Educational Technology and Library Science  
Faculty of Education  
University of Uyo-Uyo  
Akwa-Ibom State, Nigeria

Introduction

University libraries set up their services to enhance the teaching and research missions of the institutions, particularly for students. Student characteristics have an effect on their use of library services. This study examines the differences among academic disciplines, year of study, and socio-economic background as independent variables in students' use of library services in the University of Uyo.

Hypotheses

1. There is no significant difference in the use of library services among students of different academic discipline (science, social science, arts and humanities) in the University of Uyo.

2. There is no significant difference in the use of library services by undergraduate students in their penultimate and fourth year in the University of Uyo.

3. There is no significant difference in the use of library services among students of different socio-economic status (high, middle, low) in the University Uyo.

Literature Review

There have been many studies of academic library use. Williams (1995) surveyed Canadian undergraduate library use, and found that active learners who participate more in class, and who read, write and study more are regular and active library users. Fowowe (1989) found differences in the frequency of library use of by faculty and students, and that 94.8% of students use library facilities. Olanlokun (1982) found that students use the library for class work, research, discussions, leisure, and other purposes. Guskin (1996) emphasizing reports that library use promotes active learning and thus contributes to students' ability to think critically and work well independently and in a group. Ajayi (1993) notes that students who do not appreciate the value of the library are at a disadvantage, and may visit the
library to only read for examinations. Unomah (1996) finds that faculty have the major responsibility for students’ use or lack of use of the library. Whitemire (2001) contends that changes in user patterns have implications for university library services such as reference and institution.

Authors such as Boakye (1999) and Rosch (2003) have examined the differences between independent variables of user education and journal collections and library use. None of these studies provided empirical evidence on the effect students characteristics on their use of library services, although they show difference in library use among students from different disciplines. Specific user related characteristics that have been measured in the past according to Powell (1997) includes frequency of library and information use, reasons for use, types of library information use, attitudes and opinions regarding libraries, reading patterns, level of satisfaction, demographic data, personality, lifestyle and awareness of library services.

Ajibero (1998), and Aguolu and Aguolu (2002) find that Nigerian university libraries do not meet user expectations. As a result, most students do not learn how to use the library and are not aware of the relationship of the library to their studies.

The literature reveals that rising university costs have made students more selective in choosing a university. Andaleeb and Simmonds (1998) find that students expectations of libraries vary, making it imperative to better understand and define specific student needs. Leckie and Fullerton (1999) assert that information literacy skills are desirable across disciplines, especially in science and engineering, but that professional associations do not necessarily support that. Eskola (1998) found large differences in how students of different disciplines use the library. Hiller (2001) recommends a strategic plan that will “develop and implement a study to identify user populations, their information needs and how well they are to be met.” Christopher and Menon (1995) observe that one element of high quality service is the “incorporation of user personal needs and expectations into the development of programs and service.” According to them, the continued success of a service organization depends on the organization’s ability to adjust its products and services to correspond to user needs. Many authors have summarized patron surveys in which they noted that age, academic discipline (education), and income rate are significant determinants of library use in more than 90 percent of the studies using these variables. Sharma (1988) observed that at the undergraduate level, students are mindful of acquiring qualifications and would like to work on prescribed courses of study. Level of academic study increases familiarity with and use of libraries.

Authors like Ehikhamenor (1990), Ifidon (1997), Lubans (1998), and Adelani, (2002) agree on the need to provide information for all categories of users. Goje (1995) notes that students must have access to all resources available in the library. Mathacidesona (1997) asserts that the traits that influence information requirements of library users are qualification, years of study, motivation, and interest. Zaki (1991) observe that low-income students may have less knowledge of library facilities.

Various things affect students’ decision to attend a particular institution. Andaleeb and Simmonds (1998) state that the socio-economic level of parents is a crucial factor. The quality of services the library provides is also a factor. Aguolu and Aguolu (2002) attribute this to students’ financial problems, because many do not have enough money to purchase even the required texts, which are unavailable in the local market, even if the students had the funds to purchase them. The Nigerian undergraduate depends heavily on library resources. Feather and Sturges (1997) emphasize the growing consensus that for libraries to be truly effective, they must be concerned with their performance, and that the most meaningful indicators of performance are user-oriented.

**Methodology**

This study uses a survey. The population was 2,644 third- and fourth-year students who were fully registered library users of the University of Uyo Library for the 2003/2004 academic session. Leckie and Fullerton (1999) observe that third- and fourth-year students possess the basic information literacy
skills that first- and second-year students may lack. The sample is 20% (528). A stratified random sampling technique was used to select a sample from each of the three faculties, in proportion to the actual size of the group in the total population. The faculties of sciences, social sciences and humanities, and arts were chosen because they had more students than the other faculties. Wimmer Dominick (1987) advises selecting a larger sample than is needed to account for attrition. A balloting system was used to select subjects, using students' library registration. The instrument for data collection was a questionnaire: Questionnaire on Student's Characteristics and Utilization of Library Services (QSCAULS). The questionnaire had eleven questions, including name, department, faculty, gender, type of programme, course of study, duration of course, subject area, age, student characteristics, and library use. Four Likert scales were used to about library use. Content and face validity were established using experts in the faculty of education, University of Uyo, who made some corrections to validate the instrument. The test/retest method was used to determine the reliability coefficient of the research instrument. Reliability was an average score of 0.90

Analysis

A total of 428 questionnaires were returned, for a response rate of approximately 81 percent, which was an adequate response, particularly given the limited time students have for such activity. Of the 428 who completed the questionnaire, 268 (62.6%) were male, while 160 (37.4%) were female. Five age brackets were identified and used for analysis. The highest number was between 21 and 26, with 158 (36.9%), while 106 (24.8%) were 27 to 32. Students 39 and above were 66 (or 15.4%) There were 56 (13.1%) from 33 to 38 years and 42 (9.8%) who were younger than 20. Three types of programme were identified and used for this study's analysis. The results indicate that 281 (65.7%) were on a regular programme, while continuing education was 86 (20.0%), and part-time (or "sandwich") with 58 (13.6%). One hundred forty (32.7%) said that their parents had a university degree. The parents of a further 85 (19.9%) were second degree holders. The parents of 46 (10.8%) hard third degrees. Senior Secondary Certificate Examination (SSCE)/ West African Examinations Council (WAEC) and First School Leaving Certificate were held by 42 (9.8%) and 15 (3.5%) respectively, while about 100 (23.3%) of the students stated that their parents had no formal education.

Hypothesis Testing

T-test, analysis of variance (ANOVA), and multiple classification analysis (MCA) were used to analyze the data. Testing was conducted at (p<0.05) level of significance.

Hypothesis 1

Table 1. One-way analysis of variance (ANOVA) of scores of students' academic discipline (science, social science & humanities, arts) on their utilization of library services in the University of Uyo.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>f-cal</th>
<th>f-crit</th>
<th>Decision at p &lt; 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>54956.46</td>
<td>2</td>
<td>27478.23</td>
<td>299.28</td>
<td>3.86</td>
<td>*</td>
</tr>
<tr>
<td>Within groups</td>
<td>39021.41</td>
<td>425</td>
<td>91.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93977.88</td>
<td>427</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = Significance at p <.05 alpha level. Critical f value = 3.86

As shown in Table1, the f – value obtained was 299.28. The f-calculated value of 299.28 is greater than the critical f-value of 3.86, and the null hypothesis is rejected. This implies that students' academic discipline affects their use of library services. MCA was used to determine the specific effect of students' academic discipline on their use of library services.
Table 2. MCA showing one-way analysis of variance of students' academic discipline (sciences, social sciences, arts) using pretest scores

<table>
<thead>
<tr>
<th>Variable + Category</th>
<th>Dev'n</th>
<th>Eta</th>
<th>Dev'n</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACADEMIC DISCIPLINE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sciences</td>
<td>201</td>
<td>-10.71</td>
<td>-10.71</td>
<td>0.76</td>
</tr>
<tr>
<td>Social science</td>
<td>152</td>
<td>14.48</td>
<td>14.48</td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>75</td>
<td>-0.66</td>
<td>-0.66</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Multiple R. squared = 0.59 Multiple R. = 0.77

The result shows a multiple regression index (R) of 0.77 with a multiple regression-squared index (R²) of 0.59.

Hypothesis 2

Table 3. T-test comparison of scope of students' year of study on their use of library services of the University of Uyo.

<table>
<thead>
<tr>
<th>Level of study</th>
<th>N</th>
<th>X</th>
<th>S.D</th>
<th>df</th>
<th>t-cal.</th>
<th>t - cri.</th>
<th>Decision at P &lt; 05</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 level</td>
<td>250</td>
<td>65.70</td>
<td>1.11</td>
<td>426</td>
<td>21.21</td>
<td>1.96</td>
<td>*</td>
</tr>
<tr>
<td>400 level</td>
<td>178</td>
<td>87.25</td>
<td>9.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P <0.05, DF = 426, t-calculated = 21.21 * = Significance t-critical = 1.96

The t-value is 21.21. The obtained t-value (21.21) is greater than the critical t – value of 1.96. The null hypothesis is rejected. There is significant difference between students' year of study on their use of library services of the University of Uyo.

Table 4. MCA showing t-test analysis of students' year of study on their use of library services.

<table>
<thead>
<tr>
<th>Variable + Category</th>
<th>Dev'n</th>
<th>Eta .72</th>
<th>Dev'n</th>
<th>Beta .72</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEVEL OF STUDY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300 level</td>
<td>250</td>
<td>-8.96</td>
<td>-8.96</td>
<td></td>
</tr>
<tr>
<td>400 level</td>
<td>178</td>
<td>12.59</td>
<td>12.59</td>
<td></td>
</tr>
</tbody>
</table>

Multiple R. Squared = 0.51

Multiple R. = 0.72

As shown in the table above, the multiple regression index (R) was 0.72 index, while multiple regressions squared index (R²) indicates 0.51.
Hypothesis 3

Table 5. One-way analysis of variance (ANOVA) of scores of students' socio-economic status (high, middle, low) on their utilization of library services

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>f-cal</th>
<th>Decision at P&lt;.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>60038.376</td>
<td>2</td>
<td>30019.188</td>
<td>375.909</td>
<td>*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>33939.500</td>
<td>425</td>
<td>79.858</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93977.876</td>
<td>427</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = Significance at P < .05 alpha level Critical f-value = 3.86

The calculated f-value, 375.909 was greater than the critical f-value, 3.86, therefore the null hypothesis is rejected. This implies that students' socio-economic status (high, middle, low) significantly affects their use of library services. MCA of the three levels of socio-economic status (high, middle, low) was considered in order to determine the specific effect on use of library services in the University of Uyo, as depicted in Table 6:

Table 6. Multiple Classification Analysis (MCA) showing one-way analysis of variance (ANOVA) of students socio-economic status (high, middle, low) using pretest scores.

<table>
<thead>
<tr>
<th>Grand mean = 74.66</th>
<th>N</th>
<th>Unadjusted</th>
<th>Adjusted independent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable + Category</td>
<td></td>
<td>Dev'n</td>
<td>Eta</td>
</tr>
<tr>
<td>SOCIO-ECONOMIC STATUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>50</td>
<td>-22.66</td>
<td>-22.66</td>
</tr>
<tr>
<td>Middle</td>
<td>150</td>
<td>-8.16</td>
<td>-8.16</td>
</tr>
<tr>
<td>Low</td>
<td>228</td>
<td>10.34</td>
<td>10.34</td>
</tr>
<tr>
<td>Multiple R. Squared = 0.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple R. = 0.80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown the multiple regression index (R) = 0.80 with a multiple regression squared index of $R^2$ = 0.64.

Discussion of Findings

The aim of this study was to establish the difference among students' characteristics and their use of library services. The results showed a significant difference between students academic discipline (science, social sciences and humanities, and arts) on their use of library services. Students in the social sciences and humanities use the library the most, while students in the arts use it more than those in the sciences. This finding is in line with what was previously reported by Andaleeb and Simmonds (1998), Eskola (1998), and Leckie and Fullerton (1999).

Another area of investigation in this study was library use by undergraduate students in their third and fourth year. The findings reveal a significant difference between third- and fourth-year students. MCA showed that 51% of the total variance in the use of library services was attributable to the influence of
students' year of study. This finding is corroborated with what was reported by Sharma (1988), Goje (1995), Mathacidesona (1997), and Leckie and Fullerton, (1999).

Socio-economic status (high, middle, low) has a significant effect on students' use of library services. Students with low socio-economic status made more use of library services than those with middle or high. MCA showed that 64% of the total variance in the use of library services was attributed to the influence of socio-economic status. This distribution and the relationship of socio-economic status with other variables will make use of library services among these students skewed. This finding agrees with what was previously reported by Zaki (1991), Andaleeb and Simmonds (1998), Aguolu and Aguolu (2002).

Conclusion and Recommendations

The study shows variation in library use based on academic discipline, year of study, and socio-economic background. Kimmo (1997) asserts that the analysis of the "inner worlds of the user" is strengthened by studies like this. The University of Uyo library should give priority to the needs of students, who may be the library's primary clientele even though they have other obligations and constituencies. Also, the library should recognize that students share many characteristics. University library services should be designed to meet the range of information needs that arise in academic disciplines and in all parts of the university.

References


Ajayi, K. (1993). Library and information services for educational development in Nigeria. Lecture delivered at the annual lecture of the Nigerian Library Association (Ogun state chapter, UNAAB, Abeokuta)


Eskola, E. (1998). University students' information seeking behavior in a changing learning environment: How are students' information needs, seeking, and use affected by new teaching methods? Information


