

Awareness as Correlate of Undergraduate Students' Utilisation of Library Software in Universities in South-West, Nigeria

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ABSTRACT

This study investigated the awareness and utilisation of library software by undergraduate students in universities in South-west Nigeria. The descriptive research design of the ex post facto was adopted using a sample of 1,527 selected from the total population of 239,048 undergraduate students in the universities. A questionnaire was used to collect the data. The finding of the study revealed that the extent of utilisation of library software by undergraduate students was high. Also, the majority of undergraduate students utilised library software in the university libraries between two to three times a week. Similarly, the findings show that awareness had an influence on the utilisation of library software by undergraduate students in the universities ($r = 0.563$, $N = 1333$, $P < 0.05$). The study concluded that awareness influenced the utilisation of library software by undergraduate students in universities. The study, therefore, recommends that the importance of the awareness of library software should be emphasized in the library to enhance its utilisation by the students in the university libraries.

1. Introduction

The utilisation of library software has revolutionised library services from old-style services of card catalogues, printed books and periodicals, bibliographic instructions, and in-person or face-to-face reference, to new services and delivery modes incorporating: electronic collections, such as e-books, e-journals and databases; virtual reference services, and other online services. The utilisation of library software enables libraries to have efficient control over information storage, processing and dissemination and this has changed the information environment in the university library system

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(Fati & Adetimirin, 2017).

Library software is a programme (coded instruction) used to operate library routine tasks such as the acquisition, organisation, storage, retrieval and dissemination of books and other information materials in the library. The software is used to increase the efficiency and effectiveness of library operations and services. The development and use of library software enable the libraries to offer their users easier and faster access to information available within the libraries and to gain access to catalogues of other libraries to enhance library operation and services to eventually encourage library patronage (Kari & Baro, 2014).

The university libraries in the South-west are utilising library software. For instance, the University of Ibadan library uses Visionary Technology in Library Solutions (VTLS); Olabisi Onabanjo University, Ago-Iwoye library uses Alice for Windows; the University of Lagos library adopted Millennium, Lagos State University utilises Alice for Windows; the Federal University of Agriculture, Abeokuta, adopted Koha; Adekunle Ajasin University, Akungba library uses Strategic Library Automation and Management (SLAM); Obafemi Awolowo University, Ile-Ife library utilises VTLS; Ladoké Akintola University of Technology, Ogbomoso, the library adopted Koha; Federal University, Oye-Ekiti library adopted Koha; Federal University of Technology, Akure library adopted SLAM; Ekiti State University library adopted SLAM; Osun State University library uses Koha; and Ondo State University of Science and Technology library utilises SLAM. The utilisation of library software enhances speed, productivity, and efficiency saves manpower and avoids repetitive and clerical tasks such as filing, sorting, typing, and duplication checking. The provision of library services through the use of this software could enhance the use of the library (Iroaganachi, Iwu, & Esse, 2015). The users' end of this library software provides utilisations' interface such as Online Public Access Catalogue (OPAC), login, search, simple and advance search options, web browsing, navigation options, Z39.50, among others. The users' end interface enables the utilisation of library software by library users.

The utilisation of library software facilitates quick and easy access to information processing, storage and dissemination to users such as lecturers, students and the university communities. The software provides a platform for students to access library resources faster than when libraries were being operated without software and other information technology tools like computer hardware, CD-ROM searching, online databases, OPAC and e-resources. The utilisation of library software by undergraduate students and the university community offers services such as the use of OPAC to search library holdings and to retrieve information materials in the library faster and with ease, remotely visit the library through the website, placing books on hold to be taken at a later time and charging and discharging of books. These services are provided in the library with the use of library software to undergraduate and postgraduate students as well as the university community. As much as it is equally good for the library to provide resources and services, it is also equally good to determine the awareness of these services by the undergraduate students in the university libraries (Fati & Adetimirin, 2015).

Awareness is a state of being knowledgeable about the availability of computer hardware, software, CD-ROM, OPAC and Internet connectivity in the university library. Eiriemiokhale and Ibeun (2017) described awareness as the degree of knowledge about services such as software use, OPAC, online databases and CD-ROM searching available for use in the library. Awareness can also be described

as knowledge of the existence, benefits and purpose of utilisation of library software. Similarly, Song, Buba and Song (2018) described awareness of OPAC as knowledge of it and maintained that it is also a first step to increased usability of information materials in the library and outside libraries or online databases to aid students in their learning process.

Fabunmi and Asubiojo (2013) reported that majority of the library users such as undergraduate students may not be aware of the utilisation of library software in the libraries. The research recommended that libraries should improve on the awareness of ICT tools in the library so that users will be acquainted with the developments and make judicious utilisation of the services. The use of any service by the intended users could be a function/correlate of awareness of that service. If the students are not aware of the ICT tools and other services in the library, they may not know that the service is meant for them, and because they do not know, it may lead to a decline in the use of the library. Therefore, this study set out to investigate awareness as a correlate of undergraduate students' utilisation of library software in universities in South-west Nigeria.

2. Objectives of the Study

The main objective of the study is to investigate awareness as a correlate of undergraduate students' utilisation of library software in universities in South-west Nigeria. The specific objectives are to:

- 1) assess the extent of utilisation of library software by undergraduate students in universities in South-west Nigeria;
- 2) examine the frequency of utilisation of library software by undergraduate students in the university libraries in South-west Nigeria; and
- 3) determine the influence of awareness on the utilisation of library software by undergraduate students in university libraries in South-west Nigeria.

2.1 Research Questions

- 1) What is the extent of utilisation of library software by undergraduate students in the universities in South-west Nigeria?
- 2) What is the frequency of utilisation of library software by undergraduate students in the university libraries in South-west Nigeria?
- 3) How has awareness influenced the utilisation of library software by undergraduate students in universities in South-west Nigeria?

2.2 Hypothesis

There is no correlation between awareness and utilisation of library software by undergraduate students in universities in South-west Nigeria.

3. Literature Review

Software is a sequence of instructions given to a computer to perform a specific function. Various types of software exist; these are system software and application software. System software (operating system, utility software, programme tools and editor) are system-oriented software which provides the interface between the computer and the users. It also allows application packages to be installed on the computer. Application software is user-oriented software which is designed for the users to perform a specific task. Another type of software is called open-source software (Ayodele & Muhammed, 2016).

Some software has been designed specifically to suit library functions. These library functions are the acquisition, organisation, storage, preservation and retrieval of information resources in the library. Kari and Baro (2014) inferred that software technologies used in the library include database management systems, client-server architecture, search engine technology, and software used in web-based applications. Peter (2014) reported that academic libraries are at the forefront of the use of software packages and other information technology tools all over the world. The software and other information technology tools are used to handle routine tasks in the libraries for more effective and efficient service delivery. The purpose of library software is to facilitate easier and faster library routine tasks such as the organisation of information materials, storage, retrieval and dissemination of information materials in the library to undergraduate students and the university community. The majority of university libraries utilised open-source software (Fati & Adetiminrin, 2015).

Open-source software provides an alternative to the sometimes highly prohibitive cost of proprietary software. Examples of open-source software utilised in the libraries are Alice for Windows, GLASS, CDS/ISIS, Strategic Library Automation and Management (SLAM), Liberty, Tin-Lib, X-Lib, Libsys, Virtua, E- Lib, Libra, Greenstone, Evergreen, Dspace, fedora, KOHA, Millennium mi, Alexandria among others. The utilisation of library software has revolutionised information transmission and storage and has brought the world to the doorsteps of people. It is a new paradigm in all spheres of life, be it governance, civil service, health, business, education, and the like libraries globally have undergone a significant change in the past two decades due to the application of information technology. Automated acquisitions, machine-readable cataloguing, circulation controls, online information retrieval, selective dissemination of information (SDI), resource sharing, electronic document delivery, CD-ROM/DVD databases, online journals and electronic databases through the utilisation of library software, have brought unprecedented benefits to the libraries. All these are put in place to encourage library patronage by students (Ayodele & Muhammed, 2016).

Virtua software is developed by Virginia Technology Library Solutions (VTLS) Inc; the leading library automation vendor in Blacksburg, USA. It is a fully integrated library management package acknowledged internationally to deal with a wide range of library functions. Virtua provides web OPAC and a portal that facilitate the patrons to interact. The maximum and effective utilisation of library software may have a direct difference in users' awareness of them. In this respect, the finding revealed that students, research scholars and lecturers at IIT Delhi are aware of library software (Ahmad, 2014).

The utilisation of library software and its implementations in libraries increase access to a variety of information sources. These sources are digitised information materials, electronic information resources, databases and CD-ROM searching in the libraries. These make access and retrieval of information materials easier and quicker in the library. It also saves time for the students and makes it easier for students to retrieve information resources in their comfort (Pandya & Darbar, 2017).

In most university libraries in Nigeria, major software packages often used include CDS/ISIS, X - Windows Library Automation System (X - LIB), The Information Navigator Library Software (TINLIB), Graphical Library Automation Systems (GLAS); and Alice for Windows. In 1994/1995, the Nigerian Universities Commission (NUC), through a World Bank facility, acquired and distributed personal computers along with 4-user TINLIB software to some federal universities. Only a few universities were able to make some headway with the TINLIB software after a lot of adaptations. As a result, many university libraries had changed to more user-friendly library software. The Kenneth Dike Library, University of Ibadan was able to generate computer-readable tickets as of December 1995. The library database now runs on library software called Alice for windows. Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, created its database with the TINLIB software as being operational in September 1997. The library has migrated to VTLS (Fati & Adetimirin, 2015).

Similarly, these software packages apply to various sections in the library which are called modules. The acquisition module has simple acquisitions and full acquisitions modules. The simple acquisitions module makes it possible to acquire materials and add them directly to the catalogue. The cataloguing module has functions such as MARC management, import/export, copy records, fast cataloguing and searching. The MARC Management cataloguing module is used to do different cataloguing for monographs, electronic resources, periodicals, etc. Import/export is used to import records in ISO2709 format (the MARC reservoir) and through Z39.50 (client) for fast cataloguing.

Also, undergraduate students and other library users are expected to enjoy the advantages offered by the library most especially in the use of OPAC for their information resources. OPAC is accessible in the library either through the Local Area Network or through the internet. This provides an opportunity for undergraduate students to access library resources at their convenience. But the undergraduate students may not enjoy these benefits if they are not aware that such an opportunity is available for them to use in the library (Fati & Adetimirin, 2015).

Fabunmi and Asubiojo (2013) investigated the awareness and use of the Online Public Access Catalogue (OPAC) by students of Obafemi Awolowo University, Nigeria. A survey research design was adopted for the study. A total of 800 copies of the questionnaire were distributed to undergraduate students at the university. A total of 520 copies of the questionnaire were retrieved and used for the study. The study revealed that undergraduate students did not utilise the library software at the university. Also, the study revealed that the majority of the respondents lacked information-searching skills, lack of awareness and had an irregular power supply. The study recommended that the library should create more awareness and effective education for students at various levels to ensure maximum utilization of library resources.

Furthermore, Ahmad (2014) examined library software awareness with a special focus on the OPAC Vs card catalogue among the users of the Indian Institute of Technology (IIT) Delhi, IIT

Kanpur, and Kashmir University. The questionnaire was used to collect data for the study. The data were analysed using descriptive statistics. The finding revealed that the majority of users such as undergraduate students and other university communities in select IITs were using OPAC, while the utilisation of OPAC in Kashmir University was comparatively lesser. The author recommended that there should be further improvement on the part of the select libraries to take appropriate measures for enhancing the library software awareness and subsequently the usage of OPAC.

Similarly, Akano (2017) investigated demographic variables as factors influencing the accessibility and utilisation of library software by undergraduates in two private universities in Nigeria. A descriptive survey was adopted for the study. The study population comprised 4,860 undergraduate students. Simple random sampling was used to select a sample size of 244. A total of 244 copies of the questionnaire were administered to the respondents. Data were analysed using frequency counts, percentages and regression analysis. The study revealed that undergraduate students utilized library software occasionally. The author recommended that undergraduate students at all levels should be encouraged to use the library software regularly by creating more awareness.

A study carried out by Pandya and Darbar (2017) examined the benefits of the utilisation of library software in the library. The study was survey research. A questionnaire was used to collect data from 100 respondents. The result of the study revealed that the utilisation of library software provided quick access to library information materials. This enabled the respondents to patronise the library information materials. The result also revealed that library software utilisation saved the time of respondents in locating information materials in the library.

Likewise, Ayodele, and Muhammed (2016) carried out a study on application software packages for library operations and services in federal university libraries, in Nigeria. The study adopted a survey research design. A questionnaire was used as a data collection instrument. A total of 218 respondents were purposively selected as a sample. The data collected were analysed using tables, frequency count, percentage, mean and standard deviation. The result of the study revealed that library application software offers information managers many opportunities to improve library services to their clients. It makes information resources easier to be located and retrieved. Also, it enables library staff to serve library patrons better by facilitating the execution of a multitude of operational tasks. These operational tasks are quick access to information resources, saving time, quick retrieval of information resources in the library, OPAC, and management of e-resources and reference services among others with less stress.

David and Simon (2020) investigated undergraduate awareness, utilization and satisfaction with online public access catalogues (OPAC) in selected University libraries in Nasarawa State, Nigeria. The study adopted a survey research design. The total population of the study comprised 7,233 undergraduate students in two (2) public universities in Nasarawa State, namely Federal University Lafia (FULAFIA) and Nasarawa State University, Keffi (NSUK). The study used Taro-Yemene's formula to draw a sample size of 379 from the total population. A total of 379 copies of the questionnaire were distributed and 362 were retrieved for analysis representing a percentage of 95.5%. Data were analyzed using frequency counts; mean scores and standard deviation. The findings of the study revealed that undergraduate students in selected university libraries in Nasarawa State utilised library software through OPAC to a little extent. Similarly, the study revealed that undergraduate

students were satisfied with library software to a little extent. Also, the finding revealed that undergraduate students were highly aware of library software in university libraries. The author recommended that university libraries should provide more awareness programmes to encourage students to use OPAC more.

Olatunji and Tiamiyu (2022) evaluated the adoption and use of integrated library management software by undergraduate students in selected private University Libraries in Osun State, Nigeria. The study used a descriptive and correlation survey research design. The total population comprised 5,505 undergraduate students of Adeleke University, Fountain University and Redeemers University. Slovin's formula was used to select 384 sample sizes from the total population. A questionnaire was used for data collection. The data collected were analysed using descriptive and inferential statistics. The findings revealed that majorities the students utilized library software. Also, the finding revealed that erratic power supply, lack of enough user education on the use of ILS services, internet network issues, lack of technical know-how, lack of technical facilities and lack of training as the major challenges faced by undergraduate students using library software. It study recommended that the management of university libraries should improve on creating awareness among the library users so that to understand the importance of using the library software and services.

The study carried out by Fabunmi and Asubiojo (2013), Ahmad (2014), Adetiminrin (2015), Ayodele and Muhammed (2016), Akano (2017), Pandya and Darbar (2017), David and Simon (2020), Olatunji and Tiamiyu (2022) examined either utilisation of library software or awareness but none of the studies examined the extent of utilisation of library software and the influence of awareness on the utilisation of library software.

4. Methodology

The study covered undergraduate students in public universities in South-west Nigeria. Fourteen public universities were selected for this study; these are the six federal universities and eight state universities in South-west Nigeria. These public universities were selected because they have more students than private universities in the region. Also, they are being funded by the governments at the federal and state levels. The descriptive research design of the ex-post-facto was adopted for this study. The total population considered in the study was 239,048 undergraduate students in South-west Nigerian universities. The sample for this study was justified based on the use of the Research Advisors' (2006) published table in which ± 2.5 was taken for precision with a confidence level of 95%. This gave a total of 1527 respondents which represent the sample for the study. A questionnaire was used as the research instrument for data collection. The reliability of the instrument was determined through the split-half method when it was administered to thirty undergraduate students who were outside the envisaged population but shared the same characteristics as the respondents in the study. The thirty responses were collected and split into two halves and were correlated. The reliability coefficient using Cronbach's alpha yielded $r = 0.80$. The researcher moved around the participating universities to administer the questionnaire after seeking permission from the appropriate quarters. In each of the universities, respondents informed consent was sought before

the administration of the questionnaire and they were assured of the confidentiality of the data they supplied, and that the exercise was purely for research. A total of 1527 copies of questionnaires were randomly distributed to undergraduate students in the selected university libraries out of which 1333 copies were returned, representing a response rate of 87.3%. The data collected were analyzed using the Statistical Package for Social Sciences (SPSS). Tables, frequencies, percentages, the mean and standard deviation were used to test the research questions and Person Product Moment Correlation Coefficient was used to test the hypothesis postulated for this research.

5. Result of the Findings

Table 1 shows that the highest number of responses was from EKSU. A total of 137 (93.2%) out of 147 copies of questionnaires distributed to the university were retrieved and valid for analysis. This was followed by FUYOYE, with 35 (92.1%) out of 38 distributed to the respondents. LASU, LAUTECH, AAUA, OAU and UNIOSUN with 204 (91.7%), 144 (90.0%), 114 (89.1%) and 135 (88.8%) out of 224, 160, 128, 152 and 83 copies of questionnaire were respectively distributed to the universities, 1,333 copies of questionnaire returned were usable.

Table 1. Distribution of Questionnaire Administered, Returned and the Response Rate

Name of Universities	Number of Response Copies of Questionnaire	Response Copies of Questionnaire Returned and Valid for Analysis	Rate (%)
AAUA	128	114	89.1
EKSU	147	137	93.2
FUYOYE	38	35	92.1
FUTA	77	62	80.5
LAUTECH	160	144	90.0
LASU	224	204	91.7
OAU	152	135	88.8
OOU	64	52	81.3
OSUTECH	46	38	82.6
TASUED	78	65	83.3
UNAAB	95	81	85.3
UI	86	77	89.5
UNILAG	149	117	78.5
UNIOSUN	83	72	86.8
Total	1,527	1,333	87.3

Source: Researcher's Field Survey (2017)

Table 2 shows the distribution of respondents by gender on utilization of library software in the universities in South-west Nigeria. The majority of the respondents 704 (52.8%) were males while 629 (47.2%) were females.

Table 2. Gender and Utilisation of Library Software

Universities	Male F	%	Female F	%	Total
AAUA	68	59.6	46	40.4	114
EKSU	89	65.0	48	35.0	137
FUOYE	18	51.4	17	48.6	35
FUTA	51	82.3	11	17.7	62
LAUTECH	68	47.2	76	52.8	144
LASU	116	56.9	88	43.1	204
OAU	62	45.9	73	54.1	135
OOU	21	40.4	31	59.6	52
OSUTECH	25	65.8	13	34.2	38
TASUED	31	47.7	34	52.3	65
UNAAB	50	61.7	31	38.3	81
UI	36	46.8	41	53.2	77
UNILAG	39	33.3	78	66.7	117
UNIOSUN	30	41.7	42	58.3	72
Total	704	52.8	629	47.2	1,333

F: Frequency-& Percentage (%)
 Source: Researcher's Field Survey (2017)

Table 3 shows the distribution of respondents by age range in years on library patronage in the universities in South-west Nigeria. The majority 700 (52.5%) of the respondents were between the age range of 21 to 25 years, 510 (38.3%) respondents were between the age range of 16 to 20 years, 107 (8.0%) respondents were between the age range of 26 to 30 years while 16 (1.2%) respondents were between the age of 31 to 35 years.

Table 3. Respondents' Age and Utilisation of Library Software

Universities	16-20		21-25		26-30		31-35		36 and above	
	F	%	F	%	F	%	F	%	F	%
AAUA	40	35.1	67	58.8	7	6.1	-	-	-	-
EKSU	75	54.7	54	39.4	8	5.8	-	-	-	-
UNAAB	20	24.7	50	61.7	10	12.3	1	1.2	-	-
FUOYE	6	17.1	16	45.7	6	17.1	7	20.0	-	-
FUTA	32	51.6	28	45.2	2	3.2	-	-	-	-
LAUTECH	41	28.5	97	67.4	6	4.2	-	-	-	-
LASU	80	39.2	103	50.5	16	7.8	5	3.5	-	-
OAU	51	37.7	63	46.7	19	14.1	2	1.5	-	-
OOU	22	42.3	27	51.9	3	5.8	-	-	-	-
OSUTECH	3	7.9	28	73.7	7	18.4	-	-	-	-
TASUED	25	38.5	34	52.3	6	9.2	-	-	-	-
UI	30	39.0	40	51.9	7	9.1	-	-	-	-
UNILAG	69	59.0	45	38.5	2	2.7	1	0.9	-	-
UNIOSUN	16	22.2	48	66.7	8	11.1	-	-	-	-
Total	510	38.3	700	52.5	107	8.0	16	1.2	-	-

Source: Researcher's Field Survey (2017)
 Legend: - F: Frequency

Table 4 reveals the distribution of respondents by the level of study on library patronage in the universities in South-west Nigeria. The majority of the respondents 455 (34.1%) were 200 level, undergraduate students, 378 (28.4%) respondents were 300 level, undergraduate students, 193 (14.5%) respondents were 100 level, undergraduate students, 208 (15.6%) and 99 (7.4%) respondents were in 400 level and 500 level of study respectively.

Table 4. Respondents' Level of Study and Utilisation of Library Software

Universities	100		200		300		400		500	
	F	%	F	%	F	%	F	%	F	%
AAUA	40	35.1	37	32.5	26	22.8	9	7.9	2	1.8
EKSU	11	8.0	62	45.3	38	15.3	21	15.3	5	3.6
UNAAB	20	24.7	12	14.8	17	21.0	17	21.0	15	18.5
FUOYE	6	17.1	6	17.1	11	31.4	4	11.1	8	22.9
FUTA	-	-	15	24.2	45	72.6	1	1.6	1	1.6
LAUTECH	6	4.2	96	66.7	20	13.9	8	5.6	14	9.7
LASU	57	27.9	68	33.3	59	28.9	19	9.3	1	0.5
OAU	28	20.7	28	20.7	25	18.5	51	37.8	3	2.2
OOU	-	-	27	51.9	11	21.2	13	25.0	1	1.9
OSUTECH	2	5.3	5	13.2	3	7.9	10	26.3	18	47.4
TASUED	2	3.1	28	43.1	35	53.8	-	-	-	-
UI	12	15.6	24	31.2	12	15.6	20	26.0	9	11.7
UNILAG	1	0.9	33	28.2	47	40.2	16	13.7	20	17.1
UNIOSUN	8	11.1	14	19.4	29	40.3	19	26.4	2	2.8
Total	193	14.5	455	34.1	378	28.4	208	15.6	99	7.4

Source: Researcher's Field Survey (2017)

Legend: F- Frequency, 100 Level = Year One, 200 Level = Year two of study, 300 Level =Year three of study, 400 Level =Year 4 of study, and 500 level = Year 5 of study

NOTE: FUTA and OOU 100 Levels' undergraduate students were still awaiting their admission to the university at the time of administration of the questionnaire. While 400 and 500 levels undergraduate students of TASUED were undergoing their SIWES at the time of administration of the questionnaire

5.1 Research Question One: What is the extent of utilisation of library software by undergraduate students in universities in South-west Nigeria?

Table 5 shows the extent of utilisation of library software by undergraduate students in universities in South-west Nigeria. The majority of the respondents, 1,044 (78.5%) indicated that they were utilising library software to access information resources in the library to a very high extent ($\mu=3.05$). A total of 997 (74.8%) respondents affirmed that quick access to library collections involved in utilising library software influenced them to a high extent ($\mu=2.95$), 991 (74.3%) respondents remarked that utilising library software saved their time which enabled them to patronise library better at a high extent ($\mu=2.96$) and 986 (74.0%) respondents stressed that quick retrieval of information materials through the utilisation of library software user interface helped them to a high extent ($\mu=2.94$).

Table 5. Extent of Utilisation of library software by Undergraduate Students in Universities in South-west Nigeria

S/N	Items	VH	H	L	VL	M	Σ	Decision
1	I do utilise library software to access information resources	439 (32.9%)	608 (45.6%)	201 (15.1%)	85 (6.4%)	3.05	0.856	VH
2	The utilisation of library software through the user interface (OPAC & library website) enables me to patronise the library better	316 (23.7%)	658 (49.4%)	253 (19.0%)	106 (8.0%)	2.89	0.856	H
3	Quick access to library collections involved in utilising library software makes me patronise the library.	354 (26.6%)	643 (48.2%)	245 (18.4%)	91 (6.8%)	2.95	0.849	H
4	Quick retrieval of information materials through library software user interface helps me to patronise the library	361 (27.1%)	625 (46.9%)	250 (18.8%)	97 (7.3%)	2.94	0.864	H
5	The utilisation of software in the library helps me to patronise the library better	385 (28.9%)	599 (44.9%)	248 (18.6%)	101 (7.6%)	2.95	0.881	H
6	The information technology skills I possess in utilising library software enable me to patronise the library better	366 (27.5%)	598 (44.9%)	274 (20.6%)	95 (7.1%)	2.93	0.872	H
7	Awareness of software utilisation in the library makes me patronise the library	363 (27.2%)	581 (43.6%)	279 (20.9%)	110 (8.3%)	2.90	0.895	H
8	Utilising library software to search and to know the status of library materials makes me to patronise the library.	324 (24.3%)	575 (43.1%)	316 (23.7%)	118 (8.9%)	2.83	0.898	H
9	Utilising library software saves me time which enables me to patronise libraries better	400 (30.0%)	591 (44.3%)	237 (17.8%)	105 (7.9%)	2.96	0.890	H
10	Utilising library software to place a request for library materials enhances my library patronage	350 (26.3%)	599 (44.9%)	270 (20.3%)	114 (8.6%)	2.89	0.892	H
11	Utilising library software to reserve library materials helps my library patronage	407 (30.5%)	571 (42.8%)	248 (18.6%)	107 (8.0%)	2.96	0.901	H
Overall						2.93	0.878	

Source: Researcher's Field Survey (2018)

N = 1333

Legend: *Very High (VH), High (H), Moderate (M), Low (L) and Very Low (VL) (M = Mean and SD = Standard Deviation).

** VH (3.01 - 4.00), H (2.01 - 3.00), Low (1.01 - 2.00) and VL (0.01 - 1.00)

Furthermore, 984 (73.8%) respondents maintained that utilisation of software in the library helped them to patronise the library better to a high extent ($\mu = 2.95$), 978 (73.3%) respondents agreed that utilising library software to reserve library materials helped them to a high extent ($\mu = 2.96$), 974 (73.1%) respondents agreed that utilisation of library software through the user interface (OPAC

and library website) enabled them to patronise the library better to a high extent ($\mu= 2.89$). 964 (72.4%) respondents agreed that the information technology skills they possess in utilising library software enhanced their patronage of the library to a high extent ($\mu= 2.93$), 949 (71.2%) respondents affirmed that utilising library software to place a request for library materials enhances their library patronage to a high extent ($\mu= 2.89$) and 944 (70.8%) respondents agreed that awareness of software utilisation in the library made them patronise the library to a high extent ($\mu= 2.90$).

5.2 Research Question Two: What is the frequency of utilisation of library software by undergraduate students in universities in South-west Nigeria?

Table 6 shows the frequency at which undergraduate students utilized library software in universities in South-west Nigeria. A number of the respondents, 435 (32.6%) utilised the library software between 2 to 3 times a week. A total of 354 (26.6%) respondents utilised the library software in the university libraries daily while 175 (13.1%) respondents utilised the library software in the university libraries once a week. Furthermore, 124 (9.3%) respondents utilised the library software in the university libraries once a semester while 98 (7.4%) respondents utilised the library software in the university libraries once in 2 (two) weeks. In addition, 75 (5.6%) respondents utilised the library software in the university libraries once a month.

Table 6. Frequency of Utilisation of Library Software by Undergraduate Students in Universities in South-west Nigeria

Items	Frequency	Percentage (%)
Daily	354	26.6
2 - 3 Times a week	435	32.6
Once a week	175	13.1
Once in 2 weeks	98	7.4
Monthly	75	5.6
Once a semester	124	9.3
When I fill like	72	5.4
Total	1,333	100.0

Source: Researchers' Field Survey (2018)

5.3 Research Question Three: How has awareness influenced the utilisation of library software by undergraduate students in and universities in South-west Nigeria?

The influence of awareness on the utilisation of library software by undergraduate students in university libraries in South-west Nigeria is presented in Table 7. Awareness of utilisation of library software in the library was ranked highest, 1,015 (76.1%) respondents agreed that they were aware of the utilisation of library software in the library ($\mu= 3.92$). A total of 1,009 (75.7%) respondents agreed that they were aware that library software can be used to place a request for library materials ($\mu= 3.87$), 996 (74.7%) respondents remarked that they were aware that library software could

be used to reserve library materials ($\mu=3.85$) and 983 (73.7%) respondents stressed that they were aware that library software was used for a database of the library holdings ($\mu=3.83$) while 942 (70.7%) respondents affirmed that library software was used to manage electronic resources ($\mu=3.78$) and 937 (70.3%) respondents maintained that they were aware that library software could be used to check due dates for borrowed library materials ($\mu=3.75$).

Table 7. Awareness and Utilisation of Library Software by Undergraduate students in University Libraries in South-west Nigeria

S/N	Awareness of library software	SA	A	U	D	SD	M	σ	SD
1	I am aware of library software in the library	463 (34.7%)	552 (41.4%)	132 (9.9%)	116 (8.7%)	70 (5.3%)	3.92		1.123
2	I am aware that library software is a type of Integrated Library System or Library Management System such as KOHA, Alice for Windows and Strategic Library Automation Management (SLAM)	284 (21.3%)	595 (44.6%)	190 (14.3%)	170 (12.8%)	94 (7.1%)	3.60		1.160
3	I am aware that library software is used for the database of the library holdings	367 (27.5%)	616 (46.2%)	168 (12.6%)	124 (9.3%)	58 (4.4%)	3.83		1.067
4	Library software is used to navigate the OPAC	308 (23.1%)	558 (41.9%)	267 (20.0%)	142 (10.7%)	58 (4.4%)	3.69		1.073
5	Library software is used to manage electronic resources	344 (25.8%)	598 (44.9%)	202 (15.2%)	133 (10.0%)	56 (4.2%)	3.78		1.068
6	I am aware that library software can be used to place a request for library materials	357 (26.8%)	652 (48.9%)	165 (12.4%)	106 (8.0%)	53 (4.0%)	3.87		1.025
7	I am aware that library software can be used to reserve library materials	380 (28.5%)	616 (46.2%)	165 (12.4%)	107 (8.0%)	65 (4.9%)	3.85		1.072
8	I am aware that library software can be used to check due dates for borrowed library materials	333 (25.0%)	604 (45.3%)	195 (14.6%)	131 (9.8%)	70 (5.3%)	3.75		1.095
9	I learnt about library software when my library acquired it	266 (20.0%)	428 (32.1%)	245 (18.4%)	263 (19.7%)	131 (9.8%)	3.33		1.267
10	A colleague told me about library software	217 (16.3%)	384 (28.8%)	208 (15.5%)	339 (25.4%)	187 (14.0%)	3.08		1.323
11	Library software was the key topic of a seminar/workshop I attended to learn about it	230 (17.3%)	340 (25.5%)	198 (14.9%)	337 (25.3%)	228 (17.1%)	3.01		1.372
12	I learnt about library software through vendor/developer flier	220 (16.5%)	307 (23.0%)	190 (14.3%)	366 (27.5%)	250 (18.8%)	2.91		1.382
13	I learnt about library software through a personal search	258 (19.4%)	428 (32.1%)	179 (13.4%)	299 (22.4%)	169 (12.7%)	3.23		1.332
14	I can make use of library software through the user interface (OPAC) and the university website	295 (22.1%)	452 (33.9%)	212 (15.9%)	232 (17.4%)	142 (10.7%)	3.39		1.292
15	I can access information resources in the library through library software	376 (28.2%)	507 (38.0%)	169 (12.7%)	175 (13.1%)	106 (8.0%)	3.65		1.237
Overall							3.53		1.93

Source: Researchers' Field Survey (2018)

Furthermore, 883 (66.29%) respondents agreed that they could access information resources in the library through library software ($\mu= 3.65$). In addition, 866 (65.0%) respondents agreed that library software was used to navigate the OPAC ($\mu= 3.69$), 694 (52.1%) respondents agreed that they learnt about library software when their libraries acquired it ($\mu= 3.33$), 686 (51.5%) respondents agreed that they learnt about library software through personal search ($\mu= 3.23$), 601 (45.1%) respondents agreed that colleagues told them about library software and 570 (42.8%) respondents indicated that library software was the key topic of a seminar/workshop they attended to learn about it ($\mu= 3.08$) while 527 (39.5%) respondents also agreed that they learnt about library software through vendors/developer fliers ($\mu= 2.91$).

Table 8 shows the awareness of the utilisation of library software by undergraduate students in universities in South-west Nigeria. The mean score of awareness is Mean = 2.91, SD = 0.736 while the mean score of the utilisation of library software (Mean = 3.58, SD = 0.902) of undergraduate students in universities in South-west Nigeria is found to be significant at $P < 0.05$. Thus, the mean of awareness ($r = 0.563^{**}$, $N = 1333$, $P < 0.05$) has a significant influence on the utilisation of library software. Therefore, awareness has a significant influence on the utilisation of library software by undergraduate students in universities.

Table 8. Influence of awareness on Utilisation of library software by Undergraduate Students in Universities in South-west Nigeria

Variable	N	Mean	SD	r.-value	P	Decision
Utilisation of Library software	1,333	3.58	0.902	0.563**	0.000	significant
Awareness of Utilisation of Library Software	1,333	2.91	0.736			

Source: Researcher's Computed Data (2018)

** Correlation is Significant at the 0.01 level (2-tailed)

6. Discussion of Findings

The finding of this study revealed that the extent of utilisation of library software in the universities was high. The respondents agreed that utilising library software to access information resources in the library, quick access to library collections involved in utilising library software, time-saving of the utilisation of library software, quick retrieval of information materials through library software user interface, possession of ability of utilisation of software in the library, ability to utilise library software to reserve library materials and ability to utilise library software through the user interface (OPAC and library website) was to a high extent. The finding of this study is in line with the study of Pandya and Darbar (2017), Ayodele and Muhammed (2016) and David and Simon (2020) who reported that utilisation of library software provided quick access to library collections and saved time for the respondents. These enable the users to utilise the library resources more.

Furthermore, the finding of this study is in support of the study of Ayodele and Muhamend (2016) that the utilisation of library software for quick access to information resources, quick retrieval

of information resources in the library, OPAC and management of e-resources facilitate library patronage by undergraduate students. The outcome of this study revealed that the majority of the undergraduate students in the universities were aware of the utilisation of library software in the library. The utilisation of software in university libraries could be a result of their awareness of services provided by the use of library software. The finding of this study is in line with the report of Ahmad (2014) that students are aware of fiction and non-fiction books, personal computers, software, CD-ROM, OPAC and online databases in the university libraries. This enables them to utilise the resources in the library very highly. The finding of this study is also in line with the report of Olatunji and Tihamiyu (2022) that undergraduate students were very much aware of the databases available to them.

The outcome of this study showed that there is a significant difference between awareness and utilisation of library software in universities by undergraduate students. The outcome of this study corroborated the study of Fati and Adetimirin (2015) that there was a significant moderate positive difference between undergraduates' OPAC awareness and its utilisation. The finding further showed that the variation in OPAC use was accounted for by OPAC awareness.

7. Conclusion

University libraries are important sources of information for undergraduate students. The utilisation of library software through the use of OPAC, library websites, and electronic resources are important tools through which undergraduate students can gain quicker and broader access to libraries' holdings in Nigeria. The utilisation of information resources in libraries is a prerequisite to information acquisition for learning, teaching and research for undergraduate students in universities. The findings of this study revealed awareness has an influence on the utilisation of library software by undergraduate students in universities.

Furthermore, the study ascertained that there was a significant relationship between awareness and utilisation of library software by undergraduate students in universities. It is therefore important to note that as undergraduate students, there is always the need to utilise the university library. Based on the findings, the study concluded that the utilisation of library software is essential for enabling undergraduate students in universities to source information resources in the library for learning and research activities.

8. Recommendations

Based on the findings of this study, the following recommendations are made to increase the library patronage of undergraduate students in university libraries in Nigeria:

- 1) Library administrators/Librarians should create more awareness using orientation, campus radio jingles, billboards, banners and handbills.
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- 2) The librarians should assist undergraduate students in retrieving information resources in the library.
- 3) There is a need to evaluate the importance of databases and library websites in libraries to determine if there is a necessity to create more awareness or re-package them.
- 4) The library administrator or librarians should organise an exhibition of library resources and services each semester to showcase the various resources and services available in the library and their importance.
- 5) The librarians should train and retrain students on how to explore the library collections through the library software user interface to retrieve library materials.

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